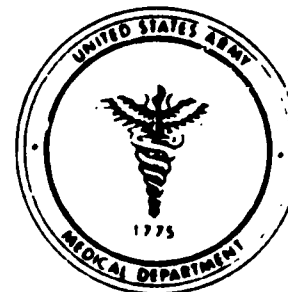


United States Army
Health Care Studies
and



Clinical Investigation Activity

AD A139052

QUALITY OF CARE INDICATORS IN THE AMEDD

by

MAJ Donald E. O'Brien, Ph.D.
CPT(P) James M. King, Ph.D.
A. David Mangelsdorff, Ph.D.

FINAL REPORT # 83-008

SEPTEMBER 1983

Copy available to DTIC does not
permit fully legible reproduction

US ARMY

HEALTH SERVICES COMMAND

FORT SAM HOUSTON, TEXAS 78234

DISTRIBUTION STATEMENT A

Approved for public release
Distribution Unlimited

DTIC
ELECTE

MAR 14 1984

B

84 03 02 067

DTIC FILE COPY

DISCLAIMER NOTICE

**THIS DOCUMENT IS BEST QUALITY
PRACTICABLE. THE COPY FURNISHED
TO DTIC CONTAINED A SIGNIFICANT
NUMBER OF PAGES WHICH DO NOT
REPRODUCE LEGIBLY.**

NOTICE

The findings in this report are not to be construed as an official Department of the Army position unless so designated by other authorized documents.

Regular users of the services of the Defense Technical Information Center (per DOD Instruction 5200.21) may purchase copies directly from the following:

Defense Technical Information Center (DTIC)
ATTN: DTIC-DDR
Cameron Station
Alexandria, VA 22314

Telephones: AUTOVON (108) 28-47633, 34, or 35
Commercial (202) 27-47633, 34, or 35

All other requests for these reports will be directed to the following:

US Department of Commerce
National Technical Information Services (NTIS)
5285 Port Royal Road
Springfield, VA 22161

Telephone: Commercial (703) 487-4600

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER Report # 83-008	2. GOVT ACCESSION NO. AD-A139052 DA 301091	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Quality of Care Indicators <i>IN THE</i> <i>AMEDD</i>		5. TYPE OF REPORT & PERIOD COVERED Final Report Oct 82 - Sep 83
7. AUTHOR(s) MAJ Donald E. O'Brien, Ph.D. CPT(P) James M. King, Ph.D. A. David Mangelsdorff, Ph.D., M.P.H.		6. PERFORMING ORG. REPORT NUMBER #83-008
9. PERFORMING ORGANIZATION NAME AND ADDRESS Health Care Studies, Academy of Health Sciences, Ft. Sam Houston, Texas 78234		8. CONTRACT OR GRANT NUMBER(s)
11. CONTROLLING OFFICE NAME AND ADDRESS Health Care Studies and Clinical Investigation Activity, Health Services Command, Ft. Sam Houston, Texas 78234		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		12. REPORT DATE September 1983
		13. NUMBER OF PAGES 129
		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; unlimited distribution.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES DA 301091 <i>United States Army Medical Department</i>		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Quality Assurance, Multi-Hospital Systems, Program Evaluation, Indicators		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This study looked at the feasibility of the <i>AMEDD</i> constructing a list of Quality of Care Indicators with which it could monitor the care given in its hospital system. Methodology included a literature review, inquiry into current military and civilian quality assurance programs, and considered the impact of using automated patient data systems in the <i>AMEDD</i> . The study concluded that rather than constructing a single list of indicators the <i>AMEDD</i> should utilize automated patient data systems to allow the		

construction of varying lists of indicators tailored to the unique needs of individual users. The study also concluded that the management of quality assurance programs at the MEDCOM level requires somewhat different management techniques than previously envisioned.

ACKNOWLEDGEMENTS

In conducting this study, the authors' received information from many different sources. Especially helpful were the following individuals: MAJ Stuart W. Baker, Patient Administration Systems and Biostatistics Activity, LTC Walter C. Anderson, HCSCIA, and COL Marshall Hinckley, Headquarters, Health Services Command. Also, supportive of our effort were the staff of the Commission on Professional and Hospital Activities, who allowed us to reproduce portions of their material in this report. Finally, we would like to thank PFC Denise Jones and Mrs. Louisa Lohman for their outstanding clerical help in preparing this document.

DTIC
ELECTE
S **D**
MAR 14 1984
B

Accession For	
NTIS GRA&I	<input checked="checked" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
PER CALL JC	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A1	23

Table of Contents

SECTION	PAGE
ACKNOWLEDGEMENTS	i
TABLE OF CONTENTS	ii
1. INTRODUCTION	1
a. The Army Medical Department	4
b. The Problem	5
c. Hypotheses	6
d. Assumptions	6
2. METHODOLOGY	7
a. Review of the Literature	7
b. Patient Data Information Systems	10
c. Theoretical Model	12
d. Informal Testing of the Model	17
3. FINDINGS	18
4. RECOMMENDATIONS	24
5. BIBLIOGRAPHY	25
6. ANNEX A - Sample Reports Produced by Individual Patient Data System	34
7. ANNEX B - Ambulatory Care Database	46
8. ANNEX C - Extract of Clinical Record QA Program Womack Army Community Hospital	51
9. ANNEX D - Extract of Quality Assurance Monitor, The Professional Activity Study	70
10. ANNEX E - Listing of Information Available in the Automated Variance Report, St. Paul Fire and Marine Insurance Company	123
11. DISTRIBUTION LIST	125

INTRODUCTION

In the last few years increasing attention has been given to the quality of health care provided by the military services. Public and congressional attention originally was focused most sharply on the Air Force as a result of the problems at the Wilford Hall Medical Center (US Medicine, 1983c). Numerous other problem areas also involving the Army and the Navy have been cited in various publications (Army Times, 1982a, 1982b, 1983b, US Medicine, 1982b). As a result of these incidents, the Department of Defense (DOD) and the various services have been charged with developing programs that would insure the quality of the care provided in military medical facilities and which would also create a system whereby substandard providers of care would be identified and eliminated from the medical system (DOD Directive, April 1983).

In 1981 The Office of The Surgeon General, US Army (SGO), recognized the need to identify factors which could be used as indicators of the quality of care being provided at Army Medical Treatment Facilities (MTFs). As a result, the present study was made a part of the FY 83 Army Medical Department (AMEDD) Study Program. Between the launching of the study in October 1982 and the preparation of the final report, a number of events have occurred which have both anticipated the recommendations of this report and have underlined the need for changes in the present AMEDD quality assurance monitoring system. For example, the Department of Defense (DOD) has recently published "national averages" of the mortality rate for selected diagnoses. In addition, DOD is requiring that all physicians providing care in military hospitals be monitored as to the mortality rates of the patients with these diagnoses under their care (Army Times, 1983c). One of AMEDD's needs in terms of evaluating the care it gives, which this study recognized, is a set of empirically derived standards that can be used to evaluate the level of care provided throughout the AMEDD system.

In order to understand the present state of affairs and the types of problems now facing the AMEDD, we should briefly trace the history of the Quality Assurance (QA) movement in the United States. Historically, the physician was the sole arbiter of the quality of care provided to the patients. Hospitals were seen only as "onlookers" and not as being responsible for the type of care that the physician provided. It was not until 1964 that a court decision found that hospitals could indeed be held liable for care provided to patients because they had the power to influence the practice of the physician within their facilities (Darling, 1964). At this point, hospitals as corporate entities, became concerned about the quality of care delivered by "private" physicians because of the obvious threats of malpractice suits for substandard care. Although not reflected in the literature, one can infer that there is some connection between this concept of corporate liability and the tendency of multi-hospital organizations to look for quality of care indicators. Two organizations which have impacted on the development of present day QA standards are the Joint Commission on the Accreditation of Hospitals (JCAH), which was established in 1951, and its predecessor, the American College of Surgeon's Hospital Standardization Program (ACSHSP) which was established in 1919. The ACSHSP developed the first minimum accreditation standards for hospitals in this country. Its successor, the JCAH, has developed more detailed and comprehensive standards for accreditation and today sets the national standards for hospital accreditation.

Another aspect of QA was recognized by the creation of Professional Standards Review Organizations (PSROs) mandated by Congress to review "the appropriateness of care provided by Medicare, Medicaid and Maternal and Child

Health Programs" (Denlo, 1983). Although primarily intended as a cost containment program, through their review processes, the PSROs have also improved quality of health care (Palmer, 1976).

As the various efforts to improve health care unfolded, a series of steps we can call the Quality Assurance Process developed. This process has five steps: (1) Problem identification, (2) Problem verification, (3) Identification of problem cause and plan for its correction, (4) Implementation of corrective action, and (5) Assessment of the effectiveness of the problem solving actions (Williamson, et al., 1983). This process has been widely adopted and fits in well with current JCAH standards. Also, many hospitals have added new personnel to support the QA Programs and have created positions for QA Coordinators. These coordinators usually report to the hospital director or assistant director, and one of their main tasks is to assure that the various departments are carrying out their individual QA reviews using this process.

Until 1982, all of the efforts were focused on improving the delivery of services to individual patients. However, the flow of this line of thought was either towards: (1) Evaluating the care provided to the individual patient by the individual provider, (2) Improving care to a certain category of patients (e.g., hypertensives), or (3) Improving care given by a particular hospital to its own patients (Graham, 1982).

Spurred by different stimuli, in 1982 the JCAH and the Army each began to look at the problem of determining QA indicators for multi-hospital systems. Through a grant from the Kellogg Foundation, the JCAH began a three year project with the Sisters of Mercy Hospital Corporation to establish QA indicators for

such systems (JCAH Perspectives, 1982), while the AMEDD directed that the present study be carried out.

THE ARMY MEDICAL DEPARTMENT

The Army Medical Department (AMEDD) is the second largest medical organization in the United States, exceeded in size only by the Veteran's Administration hospital system (HSC, 1978). Historically the process of evaluating the care given to the military and their dependents has been essentially the same as in civilian health care systems, i.e., the physician was the sole arbiter of constituted good care. In the Army, as in civilian institutions, physicians practiced in hospital based settings, and there was a peer review process. The overall level of care provided in the hospital was monitored by medical audit committees composed primarily of physicians, while final responsibility for patient care rested with the Hospital Commander, who was also a physician.

The AMEDD, in the context of the quality of care issues, can be said to have provided the structural elements of care: i.e., staff, supplies, and facilities. The AMEDD had technical control of the hospital and a type of quality control was provided through inspections by the Inspector General and JCAH accreditation visits. However, it was only recently that the AMEDD began to approach the question of quality assurance for its medical system as a whole. Because of the closeness and similarities of civilian and military medicine, it is not coincidental that the civilian world (JCAH) was also beginning to look at the same question, i.e., how to manage quality assurance programs in a multi-hospital system?

THE PROBLEM

The task which this study faces is to identify quality of care indicators for the AMEDD. This task can be approached in a number of ways. First, we can visualize quality of care indicators as they exist in much of the literature, i.e., those factors which profess to tell us of a certain level of care for a certain illness. With this as our focus, we can look at an individual patient after a treatment and decide if the patient did or did not receive adequate treatment. This view implies looking at the variables of [provider - patient - illness - treatment - standards - outcome] either singly or in some combination and making a determination as to whether the patient received good care. In practice, only a small sample of care episodes can be evaluated under this process in a non-automated system.

If we take this one step further and look at it from the point of view of the person responsible for operating a number of hospitals, the question becomes: did every provider treat every patient in an appropriate manner during a specified period of time? When asking this question our original model [provider - patient - illness - treatment - standards - outcome] does not provide an adequate answer. These variables are not simply additive, and the concatenation of the many components of such a model does not lead to a simple yes or no answer.

What emerges from our original quest of a search of indicators of Quality Care for the AMEDD, is the need to look not just for those factors that may be identified by the traditional QA literature as indicators for evaluating care in specific cases or for specific illnesses; the problem that we face in this study is to identify those factors which will allow the AMEDD to improve its Program

Evaluation System (Fifer, 1979). These factors may or may not be what the literature has traditionally described as QA indicators. However, the "indicators" chosen should allow the managers of the AMEDD program to infer the presence or absence of quality care in the AMEDD system.

HYPOTHESES

This study began with at least one explicit hypothesis: i.e., that a list of "indicators" could be constructed which would allow evaluation of the "quality of medical care" being delivered in a given MTF and in the AMEDD as a whole. An implicit hypothesis was that this development process might result in a product that was unique to military medicine. This idea took into account the thesis, advanced by some, that military medicine is unique and different from medicine as practiced in the civilian sector.

ASSUMPTIONS

A set of assumptions was made at the beginning of the study:

1. A set of indicators could be developed.
2. The number of indicators was not restricted.
3. The indicators would be measureable.
4. Prior work in both the civilian and military sectors would be employed to create the list of indicators.
5. The list of indicators did not have to be limited by current AMEDD data collecting systems.
6. Political and policy concerns of DOD and DA would not affect the final list chosen.
7. The list of indicators should not be limited to "failures" or "errors" in medical practice.

8. The list of indicators should be applicable to multi-hospital systems and to varying levels of administration.
9. The list of indicators should be useful to all of the potential users.
10. Compilation of the list of indicators should involve minimal extra work for practitioners or MTF data collectors.
11. Maximal consideration should be given to utilizing automated data systems.

METHODOLOGY

The methodology of this study consisted of the following steps:

1. Review of the pertinent literature.
2. Inquiry into current QA practices in:
 - a. Military Medical Treatment Facilities (MTFs).
 - b. Civilian MTFs.
 - c. Related civilian organizations.
3. Investigation of Patient Data Information Systems in:
 - a. The AMEDD.
 - b. Civilian MTFs.
4. Consolidation of information gathered in steps 1, 2, and 3 above.
5. Construction of an ad hoc theoretical model.
6. Informal testing of the model.

REVIEW OF THE LITERATURE

Our review of the literature on Quality of Care Indicators quickly turned into a review of the Quality Assurance field, and the majority of this section will therefore deal with QA. The literature review concentrated on discovering:

- (1) How the literature defined QA, (2) What QA methods were being used, and
- (3) Which methods could be used in the AMEDD system.

The literature makes a distinction between Quality Control and Quality Assurance (Graham, 1982c). Quality Control is seen as a process used to discover lapses in the quality of care delivered and then taking some action to correct the lapse. QA, on the other hand, is seen as being a mechanism to assure a certain level of care by preventing the level of care from falling below a given standard. The literature generally conceptualizes health care services as having three dimensions: Structure; Process; and Outcome. Structure describes the resources used for health care, e.g., facilities, equipment, staff, etc. (Palmer, 1976). Process is seen as those "activities performed in the patient management process" (Demlo, 1983). Outcome is the effect that the health care process has on the patient (Donabedian, 1982). Various attempts have been made to define QA through these dimensions and, by measuring the presence, absence, or degree of such indicators, make a judgement as to the quality of the care provided (Constanzo and Vertinsky, 1975). Such approaches as Sentinel Health Events (Rutstein, et al., 1976; Chen and Yang, 1979) the Tracer Method (Kessan, 1973), Criteria Mapping (Greenfield et al., 1975), Medical Audit (Morehead, 1982), and Staging (Gonnella, 1982), all represent attempts to establish quality assurance mechanisms.

After reviewing the various approaches to QA outlined in the literature it became obvious that most techniques described would be inappropriate to our task. For example the medical records audit (Morehead, 1983) is already in use in Army MTFs, but it is not sufficient to provide the basis for a system-wide

QA program. Sentinel events, the Tracer Method (Kessener and Kalk, 1973), Criteria Mapping (Graham and Rosenberg, 1982b), etc., all, in and of themselves, failed to meet the criteria we had set. Each of these methods would reflect only a small part of the operations of the AMEDD health care system. A review of works which encompassed a wide range of QA topics and issues (Greene, 1976; Miller and Knapp, 1979; Graham, 1982c; Lang and Clinton, 1983) failed to reveal any specific QA techniques that would seem to meet the needs of a multi-hospital system such as the AMEDD.

We next reviewed current QA practices in government and civilian hospitals. In all of them we found that the underlying motivation for QA programs (QAPs) were the JCAH requirements. The JCAH's QA program emphasizes the discovery of problems through a QA process (JCAH, 1982). This process, which was described above, is mentioned here because we discovered that a great many civilian hospitals had already added QA Coordinators to their staffs to implement the JCAH required QA programs. This QA Coordinator is responsible for overseeing the hospital QAP and, among other things, assuring that the hospital's sub-elements carry out effective QAPs by using the QA process. The position of QA coordinator has become so commonplace in civilian hospitals that a national organization has been formed called the National Association of Quality Assurance Professionals (NAQAP). An estimated five hundred persons attended its 1982 annual meeting, however, only three persons representing the AMEDD could be identified at the meeting.

In summary, hospitals are generated by the JCAH requirements for QAPs. Organizationally, with the exception of the QA Staff, the MTF organizational structure is basically unchanged from earlier JCAH requirements. At the

time that this report is being written, not all Army Hospitals have positions for QA coordinators, but a draft job description for the QA coordinator position was being staffed in August, 1983 by Headquarters, Health Services Command (HSC, 1983).

PATIENT DATA INFORMATION SYSTEMS

The Army Medical Department stores patient care data almost exclusively in individual record files. Each patient has an individual outpatient record jacket which he carries with him from post to post. Inpatient data is also kept in individual records, but the record is retained on file in the hospital that provided the care. After a number of years, the inpatient file is retired to a central records depository. The AMEDD does have an automated data system of sorts, the Individual Patient Data System (IPDS). This system was not designed to be used for QA purposes, but rather as a system to monitor general health trends in the Army. The IPDS can be utilized to produce some types of data that are useful for QA studies. Examples of the types of data available are included in ANNEX A. The problem with trying to utilize the present IPDS system as a base for a QAP is that the record length would have to be greatly expanded to handle the data necessary for a modern QAP.

The AMEDD has one automated outpatient data system currently in use in the MTF at Redstone Arsenal, Alabama. This system captures a host of outpatient data as shown in ANNEX B. This system was originally begun as a study carried out by the US Army Health Care Studies and Clinical Investigation Activity (HCSCIA) and proved to be so popular with both the health care providers and the administration of the hospital, that it was retained in operation after the test

period expired. Two other Army Hospitals have begun work with automated QA systems during the past year: Womack Army Community Hospital, Fort Bragg, North Carolina, and William Beaumont Army Medical Center, Fort Bliss, Texas. At this writing no formal reports on the outcome of these endeavors have been announced. An example of the data being collected by Womack Army Hospital is contained in ANNEX C.

TRIMIS is proposing a fully integrated medical information system, but this system is only in the very preliminary planning stages. The AMEDD requires an operational system to answer its quality assurance needs for the foreseeable future.

This study also looked at some of the automated data systems available in civilian hospitals. There are at least three automated systems that provide data summaries to subscriber hospitals. They are the Professional Activities Studies (PAS), the Hospital Utilization Program (HUP), and the Health Services Data Systems (HSD). These three systems are similar in concept. For the purpose of brevity, we shall discuss only the largest of these, the Professional Activities Study, which has approximately twelve hundred hospital subscribers. The Hospital Utilization Program has about six hundred subscribing hospitals, and the Health Services Data System has somewhat over one hundred subscribers.

In the PAS system, data is extracted from the medical record using ICD-9-CM diagnostic codes. This information is input from a computer terminal to a magnetic tape. This tape is sent periodically to a central processing office and a monthly report is provided to each hospital. Coding of medical data is facilitated by menu driven programs which convert English words into correct ICD-9-CM codes in response to key words.

Examples of the types of data provided by PAS are given in ANNEX D. Summaries of these data are provided by such indicators as diagnosis, procedures, and mortality and morbidity rates. Data can be grouped according to the medical service to which patients were assigned (e.g., Pediatrics, Internal Medicine, etc.), and summary data are provided for the hospital as a whole. A useful feature of this report is that it contains predetermined hospital thresholds for the particular criteria being considered and indicates where care has fallen below that preselected threshold. The same report also gives comparison rates for other similar facilities.

Another example of automated data use is in the area of Risk Management. One such system, the Variance Report, consists of a coded incidence report sheet that is filled out by the hospital staff whenever an unusual incident occurs. A copy of the report is sent to a central data collecting agency which in turn provides monthly summaries of types of incidents, sites of occurrences, personnel involved and rates of occurrence in other institutions. (Annex E) More recently, some hospitals have begun to convert to fully automated systems which not only have the capability of summarizing categories of data, but are capable of recording every patient care transaction performed in the hospital. An example of such a system is that used by the New York University (NYU) Medical Center, University Hospital's Hospital Information System. The technical systems at the NYU Medical Center and the William Beaumont Army Medical Center are both provided by Technicon Systems Corporation.

THEORETICAL MODEL

The information mentioned above was reviewed with the idea of constructing an overall set of criteria for identifying the desired Quality of Care Indicators. In order to construct a model for the AMEDD, it was necessary to

visualize the system wherein the indicators would be used. First of all, the AMEDD is composed of a number of MTFs ranging from small hospitals to medical centers. These MTFs are geographically arranged under three medical commands. These commands have direct operational responsibility for all the MTFs in their area. The commands, in turn, are each responsible to a major Army Command (MACOM).

The Office of The Surgeon General (SGO) is responsible for advising DA on medical matters, and although it does not have direct responsibility for the medical commands and MTFs, it does provide technical supervision. This role as technical supervisor dictates that SGO be well informed about the levels at which the MTFs are functioning. Therefore, many levels of administrative and professional controls exist: (1) the primary health care provider, (2) the Chiefs of the Services or Department in which the care is provided, (3) the Chief of Professional Services and/or Hospital Commander, (4) the Commander of each medical command, and, (5) the SGO at DA. Thus, any QA system should produce data which are meaningful and useful to all of these levels. Therefore, our first requirement for a system is that it should provide useable data for a multi-level organization.

One element of the current AMEDD data system is that it stresses the collection of indicators that are oriented towards the bureaucrat, e.g., MCCU's, number of patients seen by categories of precedence, i.e., active duty, active duty dependent, retired, retired dependent, etc. These types of data are not at all useful in helping the provider to improve the care he is giving his patients. These data are also meaningless when it comes to evaluating the type of care that is being provided by the system.

In order to properly carry out the process of evaluation of care it will be necessary to collect different types of data on a regular basis. What is needed is the collection of clinical data which will allow the proper evaluation of the quality of the care being offered in the system. Collection of such data can, predictably, produce either of two general reactions from the providers. A negative reaction will be produced if the type of data collected stress the "mistakes" the providers have made and is used solely by non-providers to wield an indignant hatchet. On the other hand, a positive reaction can be elicited if the data collected are used to aid the providers in their treatment of patients (Hirschorn, 1981). In other words, the data should produce reports that are available to and useful to, the provider of patient care, and not just to the administrators of the systems. Therefore, the second requirement for our model is that the data collected must be disseminated to the provider to improve the level of care provided to the patients.

The issue of just what type of data should be used in judging quality of care was one of the central points of this study. One initial speculation was that one could specify a relatively small number of factors and, by measuring their occurrence or lack of occurrence, judge the quality of the care provided. However, when one took into account the variety of health care providers, physicians and non-physicians, within the system, and the multi-level use of the data, it becomes apparent that a small, "manageable" list would not meet the study's requirements.

This realization led to the third requirement for our model, i.e., the need for a large data base, utilizing all available patient data, to be used to generate the indicators of the quality of care. Items from this pool could be

selectively retrieved, in individual or aggregate form, depending upon the needs of the user. This data base would allow comparisons of the levels of care provided between like-size institutions (e.g., Medical Centers) or between like services (e.g., Internal Medicine) throughout the AMEDD. This capability now exists at an embryonic level within the AMEDD, but further development of the IPDS would be necessary if this capability was to be utilized in a routine manner.

A fourth component of our model was the idea that it should utilize a fully automated data collection, storage, and retrieval system. Increasingly, technological advances are being introduced into health care facilities (Austin and Carter, 1981; Bock, 1982; Carel, et al., 1982; Edmunds, 1983; NIS, 1983) and, as far back as 1966, government sponsored reports called for the automation of patient data systems (DOD, 1966). In fact, there exists today in the AMEDD, in raw form, most of the data needed to implement an efficient QA monitoring system. However, there is no efficient automated system that lets potential users retrieve and analyze that data in a readily useable and economic manner. If an efficient QA program is to be installed in an organization as large as the AMEDD, it is necessary that it be accomplished with the use of a modern automated data system. As Austin and Carter (1981) point out, QA systems are data dependent, and an effective clinical information system is the sine qua non in the design of a QA program.

The automated data system mentioned above would link all the MTFs into a network feeding information to a Central Data Processing Facility (CDPF). This facility would analyze the individual patient data, maintain the data base, and provide aggregate reports to the individual MTFs (much in the manner that

the PAS does). It would also provide limited reports to the MEDCOMs and SGO. In addition to its regular reports, the CDPF would have the ability to generate special reports by request for chiefs of service, MTF commanders, or MEDCOMs, would automatically generate reports for specified managers in the AMEDD system, and would furnish reports on their professional activities to each provider. The fifth component of our model then, is that the automated system be programmed to provide reports at the provider, department, and MTF levels, and that special reports be automatically produced for higher levels of management when significant deviations from performance standards occur.

One of the objectives of any QA program is to keep patient care at, or above, a pre-selected standard. In order to achieve this goal the standard selected should be measured against objective criteria. Military medicine derives its roots and its standards from the practice of civilian medicine and, in comparisons regarding the quality of military medicine, the standards used are invariably those of the civilian community (e.g., JCAH). Therefore, in the construction of a QA database for the AMEDD, the goal should be to use a coding procedure that will allow a direct comparison between AMEDD data and data derived from civilian medicine. At present the AMEDD uses an older coding system (ICD-9) that is not completely compatible with the coding system used by civilian hospitals (ICD-9-CM). The ICD-9-CM allows for a more detailed coding of diagnoses and, therefore, is more informative than the system the AMEDD is now using. The sixth requirement for our QA model, then, is that it uses an up-to-date coding system that would allow direct comparison to be made with civilian data bases. In order to accurately track data in this system, the data base should contain a means of identifying health care providers.

As mentioned earlier, the use of QA Coordinators to oversee civilian hospital QA programs has grown in recent years. However, the employment of QA Coordinators in the AMEDD seems to have lagged somewhat in the MTFs, and to have been neglected in the MEDCOMs. In order to support the earlier requirements of our model, our final requirement is that there be adequately trained personnel, in proper organizational positions throughout the AMEDD hierarchy to carry out the QA program. Table 1 summarizes the requirements of the QA Model.

TABLE 1

REQUIREMENTS FOR QA MODEL

1. Provide usable data for a multi-level organization.
 2. Data should be "user friendly."
 3. System should provide a large pool of data.
 4. Should utilize a fully automated data collection, storage and retrieval system.
 5. Capability of providing varied reports to different organizational levels.
 6. Use up-to-date diagnosis classification coding system.
 7. Properly trained personnel in proper organizational positions.
-

INFORMAL TESTING OF THE MODEL

As this study progressed we decided to test some of our impressions regarding a workable QA model for the AMEDD. For this purpose we enlisted the aid of the Quality Assurance Committee at Health Services Command (HSC) and the Patient Administration Systems and Biostatistics Activity (PASBA), both of which are located at Fort Sam Houston, Texas.

Our goal was to see if a MACOM could easily adapt to using the products of an automated QA data system without having to make any changes in its

organizational structure. Fortunately, at the time we had proposed the idea of looking begun to look at the problem of supervising the care provided in their MTFs, and had formed a QA Committee. This committee included a data analyst from PASBA. One of the initial tasks of the QA Committee was to look for ways to accomplish their mission, and the idea of looking at PASBA's IPDS database was suggested simultaneously by the PASBA analyst and by HCSCIA.

The idea underlying the committee's review of this data was as follows: By monitoring selected data, they might be able to identify potential problem areas in the health care delivery system before these problems became critical. Therefore, PASB provided the committee with a number of sets of data, broken out by MTF, which showed such things as diagnostic categories, procedures, and complication rates. These data products were first studied by the PASBA analyst to see if any trends could be discovered. The data was then studied by a physician, who reviewed the data from a clinical point of view. After this preliminary work was completed, the results of the data evaluation were reported to the full committee.

The results of this exercise was twofold. First, it demonstrated that the analysis of previously unanalyzed aggregate indices could be useful in evaluating the levels of functioning of the various MTFs grouped under a MACOM in that they allowed the MACOM to act proactively rather than reactively. Second, this exercise demonstrated that the computation of the indicators and their proper analysis required a large number of expert man hours. These points will be further discussed in the Recommendations portion of this report.

FINDINGS

At this time there are a number of alternatives available to the AMEDD in regard to its QA Program Evaluation efforts:

1. It can adopt either a fixed or a varied list of QA indicators in order to help evaluate its programs.

Initially, it may appear that a fixed list would be the option of choice. However, the use of such a list is replete with problems for, to compile the list, one would have to define the user(s). As mentioned earlier, there is more than one level of user in the AMEDD hierarchy, and each level has a different use for such a list. Second, in compiling the list, one would have to determine how the list would be used. Since we would have a multi-use list we would then be forced to deal with the problems of the length of the list. The shorter the list, the fewer the number of potential users. The longer the list, the more potential users, but the more irrelevant data would be included for any given user. Finally, the idea of a fixed list derives from the notion that it is necessary to pinpoint specific data items and mandate their repetitious collection in order to be assured of having that data available in a timely fashion. This idea is outmoded in that it presumes, as was the case in the past, that patient data statistics must be laboriously extracted manually from records, specifically for the purpose of producing the required reports. Finally, for the AMEDD to create such a fixed list for itself would only duplicate past efforts in the civilian world, and would absorb AMEDD resources which could more profitably be used elsewhere. The adoption of a system of variable lists of indicators would avoid these problems, and would allow users at differing levels to compile information suited to their own particular need. They would not be forced to deal with data that was designed for other uses.

If the AMEDD adopts the idea of variable lists for its QAP, it could immediately begin to build upon data systems now in existence. For example, it

could adopt the PAS or a similar civilian system, or begin to form its own QA data base by building upon the work already done by PASBA, Womack Army Hospital, and HCSCIA through the Ambulatory Care Database Study at Redstone Arsenal (Misener, 1983). In order to fully implement the concept of the variable lists of indicators, it will be necessary for the AMEDD to (1) fully automate both its inpatient and outpatient data systems, and (2) establish a patient data pool for QA purposes. We shall discuss both of these points.

2. The AMEDD can either stay with a partially automated patient data system, or move to establish an automated records system immediately in order to meet the needs of its quality assurance program.

IPDS, in its present form, cannot meet the needs of a QA data system. TRIMIS may eventually meet these needs, but it will certainly not do so in the near future. Thus, the AMEDD will be faced with an operational gap, in that it will be asked to monitor the quality of care it is providing, but will have no modern or efficient means of so doing. As a result it will have indicies of the overall quality of care being provided to its patients such as individual physician mortality rates, imposed on it from above.

If the AMEDD moves to automate its patient data systems, the immediate by-product will be a pool of readily available patient data which can be used by providers, as well as by managers, to monitor and improve the quality of health care within the AMEDD system.

3. The AMEDD can utilize existing staff or create new positions to monitor its QA Programs.

In the civilian community, the position of hospital QA Coordinator has become commonplace. We have noted that in HSC the need for QA coordinators in

MTFs has been recognized and the establishment of the positions is being supported. However, the need for special positions to monitor the QA Programs at the medical command level has not been recognized by the AMEDD system. Our experience with the HSC QA Committee indicates that any efforts to monitor the levels of care in the MTFs by data analysis requires great amounts of time on the part of individuals with specialized knowledge and skills. If the MTFs are to have specialists to monitor their QAPs, it is reasonable to expect that dedicated personnel should be utilized to oversee these programs at the medical command level.

4. The AMEDD can continue to use the ICD-9 coding schema or converting to the ICD-9-CM schema currently being used in the civilian sector.

Essentially, the difference between the two coding systems is that the ICD-9-CM is capable of recording more detail about any given diagnosis. Use of the ICD-9 automatically limits the amount of clinical data that can be collected about the patients in the AMEDD health care system. The two schemas are sufficiently different that it is difficult to make direct comparisons between data from military and civilian sources. The need to compare the performance of military and civilian medical systems was raised, at least implicitly, when the services were questioned by Congress about the level of care provided in military hospitals. Since valid comparisons require the use of similar coding methodologies, adoption of the ICD-9-CM schema would help to overcome this aspect of the compatibility problem.

5. The AMEDD can establish its own standards of practice by using its own past levels performance as its baseline, or it can use those provided by civilian medical facilities as its norms and standards of practice.

Since the AMEDD adheres to JCAH standards for its hospitals, it is safe to assume that civilian medical standards will continue to guide the practice of Army medicine. However, civilian standards and norms are not necessarily used in all areas of Army medicine, because within the AMEDD system, there is a lack of normative data about the civilian sector. For example, the Committee on Professional and Hospital Activities compiles from its subscribing hospitals a yearly summary of patient data that would be very useful to the AMEDD in comparing the performance of its MTFs with civilian facilities. However, at the time this report was prepared HSC did not possess this type of data. Lack of this type of information makes it difficult to arrive at valid judgments about the quality of care in AMEDD facilities. If the AMEDD is to subscribe to civilian medical standards, as JCAH accreditation implies, then it follows that an effort should be made to collect specific performance data both for its own institutions, and also for similar civilian institutions.

6. In attempting to predict and prepare for future demands of quality assurance programs in its hospital system, the AMEDD can choose a reactive or a proactive course.

As mentioned above, JCAH is doing the first work on QA indicators for multi-hospital systems. If this work is at all successful, it will certainly impact on the AMEDD system in the form of JCAH standards. At this point in time, the AMEDD can choose to wait until an outside agency defines the important factors in multi-hospital QA management and, thereby dictates how that management will occur. On the other hand, the AMEDD can begin to carry out a systematic, ongoing, research plan that will define the important aspects of multi-hospital QAPs and, as a result, take an active part in the development of the emerging

national multi-hospital QA standards. In view of the certainty of ongoing demands for QA accountability, and in view of the obvious need for a fresh approach to the management of QAPs within the AMEDD system, it would seem that the AMEDD could certainly profit from establishing an ongoing research program in this area. Such a project could be carried out independently, or in concert with JCAH's research efforts.

Based on the preceding discussion, the authors see no need for the AMEDD to construct a unique set of quality of care indicators. Since many established data bases already exist it would be more sensible to use one of them, if such a list is desired. Further instead of relying on one fixed list, the AMEDD should employ modern information technology to construct varying lists of indicators, each tailored to the specific needs of the individual users at the SGO, medical command, MTF, and provider levels. In this same vein, the AMEDD's patient data coding schema needs modification so that it will be as detailed as that of the civilian medical community, and the AMEDD needs a source of continuing information on standards of care in the civilian community.

Changes are necessary in the control over the QA functions in the MTFs. Specifically, rather than operating solely in a reactive mode, the MEDCOM must exert a proactive influence on the care given in its MTFs by conducting analyses of operational data from the MTFs in order to identify problem areas before they become critical problems. Proper implementation of such a system will necessitate the recognition that an adequate level of expertise and dedicated manpower are necessary at the medical command staff level.

Finally, the AMEDD is in need on an ongoing research plan to systematically look at the Quality Assurance Programs in its hospitals, and to make recommendations based on empirical data regarding future courses of action.

RECOMMENDATIONS

In view of the preceding discussion, it is recommended that:

1. The AMEDD not create a fixed list of quality of care indicators.
2. The AMEDD utilize variable lists of quality of care indicators tailored to the needs of specific users.
3. The AMEDD automate its clinical data system, to include both inpatient and outpatient records.
4. The AMEDD create a database of patient information which can be used both for quality assurance programs, and as a source of research data on quality assurance programs.
5. The AMEDD provide personnel slots at its medical commands to monitor quality assurance programs, in the Medical Treatment Facilities.
6. The AMEDD convert its diagnostic coding schema from ICD-9 to ICD-9-CM.
7. The AMEDD regularly obtain normative data on quality assurance indicators used by civilian hospitals, in order to provide a yardstick against which to measure its own programs.
8. The AMEDD begin an ongoing research program in the area of quality assurance in multi-hospital systems.

BIBLIOGRAPHY

1. Altman, S.H., and Blendon, R., Medical Technology: The Culprit Behind Health Care Costs? US Dept. of Health, Education, and Welfare - Public Health Service, Wash. DC., 1977, 306 pp.
2. Army Times, 1982a, 11 October, "Defense Weights Grading Plan for Work of Military Surgeons," p.32
- _____, 1982b, 1 November, "Defense to Monitor Malpractice Data, Actions," p.7
- _____, 1983a, 2 March, "DOD Orders Services to Set Medical Standards," p.7.
- _____, 1983b, 27 June, "New Program Ends Hospital Staff Complaints," pp.3,34.
- _____, 1983c, 18 July, "Deaths Prompt Changes at Jackson Hospital," p.9
- _____, 1983d, 1 August, "Sec Defense Urges Health Care Crackdown," p.7, 1983.
- _____, 1983e, 3 October, "DOD to Treat Impaired Medical People," pp.10,47.
- _____, 1983f, 24 October, "DOD Examining Four Areas of Military Medical Systems," p.62.
3. Austin, C.J., and Carter, H.S., "Hospital Information Systems and Quality Assurance," Hospital and Health Services Administration, p. 42-62, Fall, 1981
4. Avery, A.D., et al, Quality of Medical Care Assessment Using Outcome Measures: Eight Disease - Specific Applications, R-2021/2-HEW, RAND Corporation, Santa Monica, August 1976, 758pp.
5. Beary, John F., Memorandum for the Assistant Secretary of the Army (M&RA), Subject: Implementation Phasing of DOD Directive 6025.1., "Standards for DOD Health Care Provider Performance." 21 April 1983, DOD, Wash. DC.
6. Bock, F.M., "Considering Human Factors in the Initial Analysis and Design of a Medical Computer System." J. Medical Systems, 6(1): 61-76, 1982.
7. Brook, R.H., Quality of Care Assessment: A Comparison of Five Methods of Peer Review, DHEW Pub. No. HRA-74-3100; US Dept. of Health, Education, and Welfare - Public Health Service, Wash. DC., July 1973, 343 pp.
8. Brook, R.H., "Studies of Process - Outcome Correlations in Medical Care Evaluations," Medical Care, XVII(8): 868-873, August 1979.

9. Brook, R.H., and Avery, A.D., Quality Assurance Mechanisms in the United States: From There to Where? Rand Corporation, Santa Monica; DTIC Tech Report Undated.
10. Brook, R.H., et al., Quality of Medical Care Assessment Using Outcome Measures: An Overview of the Method. R-2021/1-HEW, RAND Corporation, Santa Monica, 1976, 166pp.
11. Cantor, M.M., "Goal-Oriented Nursing Care Delivery", Contemporary Nursing Review, 1-8, 1978.
12. Carel, R.S., et al., "Utilization of an Automated Multiphase Health Testing System for Performing Prehospitalization Examinations," Medical Care, 871-875; XX(8): 1982.
13. Chen, M.K., and Yang, G.L., "A Quantitative Index for Evaluating Patient Care With Longitudinal Data," International Journal of Epidemiology, 265-271, Vol 8, No. 3, 1979.
14. CPHA and INS, Hospital Record Study: Diagnosis, January-December 1982. INS America, Ambler PA., 1983.
15. Costanzo, G.A., and Vertinsky, I., "Measuring the Quality of Health Care: A Decision Oriented Typology," Medical Care, XVIII(5): 417-431, May, 1975
16. Cushing, M., "A Judgment on Standards, " American J. Nursing, 797-798, April, 1981.
17. Darling v. Charleston Community Hospital, 50 Ill, App. 2d, 253 200 N.E. 2d., 149 (1964); Gonzales v. Nork, (No. 228566 Sacramento Co., Super. Ct. Cal. 1974); Felize v. St. Agnes Hospital, 65 A.D. 2d 388 (2d Dept. 1978).
18. Daubert, E.A., "A System to Evaluate Home Health Care Services," Nursing Outlook, 168-180, Vol. 25, No. 3, March, 1977.
19. Demlo, L. K., "Assuring Quality of Health Care," Evaluation and the Health Professions, 6(2): 161-196, 1983.
20. Department of Defense-DHEW, Hospital Management Evaluation Study, Vol I, II, & III, 18 Feb, 1966.
21. Department of Defense-DHEW, Report of the Military Health Care Study Supplement: Detailed Findings. December, 1975, 1-203pp.
22. Department of Defense Directive, No. 6025.1, "Standards for DOD Health Care Providers Performance," April 19, 1983.
23. Detmer, D.E., et al., "Regional Results of Acute Appendicitis Care", J. American Medical Association, 246(12): 1318-1320, Sept 18, 1981.
24. Donabedian, A., "Quality of Medical Care", J. Family Practice, 9: 277-284, 1979.

25. Donabedian, A., "The Quality of Medical Care," in Graham, N. (Ed), Quality Assurance in Hospitals, Aspen: Rockville, 1982, pp. 15-36.
26. Donabedian, A., "Quality, Costs, and Health; An Integrative Model," Medical Care, XX(10): 975-992, Oct 1982.
27. Donabedian, A., Needed Research in the Assessment and Monitoring of the Quality of Medical Care, NCHSR, US Dept. of Health, Education, and Welfare - Public Health Service; Wash. DC., July, 1978, 37pp.
28. Edmunds, L., "A Computer Assisted Quality Assurance Model," The Journal of Nursing Administration, 36-43, March, 1983
29. Egan, A.M., "One Department's Experiences," Peer Review, 877-880, Vol. 59, No. 7, July, 1979.
30. Eichhorn, M.L., and Frevert, E.I., "Evaluation of a Primary Nursing System Using the Quality Patient Care Scale," J. Nursing Administration, 11-18, October, 1979.
31. Escovitz, G.H., "The Effects of Mandatory Quality Assurance: A Review of Hospital Medical Audit Processes," in Graham, N., (Ed) Quality Assurance in Hospitals, Aspen: Rockville, 1982, pp. 263-274.
32. Evaluation in the Health Professions, 6(2): 139-255, 1983. (Entire Issue)
33. Fifer, W.R., "Quality Assurance: Debate Persists on Goals, Impact, and Methods of Evaluating Care," Hospitals, 53(7): 163-167, April, 1979.
34. Funkhouser, G.R., "Quality of Care Part I," Nursing 76, 22-36, December, 1976.
35. Gallant, B.W., and McLane, A.M., "Outcome Criteria: A Process for Validation at the Unit Level," J. Nursing Administration, 14-20, January, 1979.
36. Ginzberg, E., The Limits of Health Reform: The Search for Realism, Basic Books, New York, 1977.
37. Given, B., et al., "Relationships of Process of Care to Patient Outcome," Nursing Research, Vol. 28(2), 85-93, March-April, 1979.
38. Gonnella, J.S., et al., "The Staging Concept - An Approach to the Assessment of Outcome of Ambulatory Care," in Graham, N., (Ed.) Quality Assurance in Hospitals, 1982, op. cit., 167-180.
39. Gordis, L. "Effectiveness of Comprehensive-Care Programs in Preventing Rheumatic Fever," in Graham, N., (Ed.), Quality Assurance in Hospitals, 1982 op. cit., pp. 111-130.

40. Graham, N., "Criteria Development," in Graham, N., (Ed) Quality Assurance in Hospitals, Aspen: Rockville, 1982, pp. 43-53.
41. Graham, N., and Rosenberg, S., "Overview of Strategies," in Graham, N., (Ed), Quality Assurance in Hospitals, op. cit.; 1982, pp. 143-147.
42. Graham, N.O., (Ed) Quality Assurance in Hospitals, Aspen, Rockville, 1982, 313 pp.
43. Greene, Richard, Assuring Quality in Medical Care, Ballinger: Cambridge 1976, 293 pp.
44. Greenfield, S., et. al., "Peer Review by Criteria Mapping: Criteria for Diabetes Mellitus," in Graham, N. (Ed), Quality Assurance in Hospitals, 1982, op. cit., pp. 149-165.
45. Health Services Data System (HSDS) SERVI-SHARE of Iowa, 600 Fifth Ave, Des Moines, IA. 50309.
46. Hegyvary, S.T., and Chamings, P.A., "The Hospital Setting and Patient Care Outcome," J. Nursing Administration, 29-32, March-April, 1975.
47. Hirschhorn, N., "Quality Assurance for a Small Planet," J. Ambulatory Care Management, 15-22, May, 1981.
48. Hopkins, C.E., et al., "Quality of Medical Care: A Factor Analysis Approach Using Medical Records," Health Services Research. 199-208, Summer, 1975.
49. Hospitals, Vol. 55(11): June 1, 1981, (Entire Edition).
50. Hospital Information System Project, University Hospital, New York, University Medical Center, Unpublished document, 1982.
51. Hospital Utilization Project, 777 Penn Center Blvd., Pittsburg, PA., 15235.
52. Houston, V., "Hospital Chain Seeks Smart, Fully Integrated Info System," Management Information Systems Week, p. 22, 27 October, 1982.
53. Individual Patient Data System, Patient Administration Systems and Biostatistics Activity, Health Services Command, US Army, Fort Sam Houston, Texas.
54. Infection Report, Information Reporting System SERVI-SHARE, Des Moines, IA, 1981.

55. Institute for the Study of Social and Health Issues, A Systems Approach to Health Manpower Utilization, A Technical Procedures Manual, May, 1973, 53 pp.
56. International Work Group on Death, Dying, and Bereavement, "Assumptions and Principles Underlying Standards for Terminal Care," American J. of Nursing, 296-300, February, 1979.
57. Joint Commission on Accreditation of Hospitals, Quality Assurance Materiel, Unpublished, October, 1982.
58. Kessner, D.M., and Kalk, C., Constrasts in Health Status, Vol. 2, A Strategy for Evaluating Health Services. Institute of Medicine National Academy of Sciences, 1973.
59. Kessner, D.M., et al., "Assessing Health Quality-The Case for Tracers," in Graham, N., (Ed), Quality Assurance in Hospitals, 1982, op. cit., pp. 239-250.
60. Kobrinski, E.J., and Cowe, John A., Letter to Editor, J. American Medical Association, 247(8): 1126 Feb 26, 1982.
61. Lamnin, M., and Snodgrass, G., Quality Assurance in Hospital Pharmacy, Aspen: Rockville, 1983, 224 pp.
62. Lang, N., and Clinton, J., "Assessment and Assurance of the Quality of Nursing Care," Evaluation and the Health Professions, 6(2): 211-231, June, 1983.
63. Lewis, E.P., "PSROs and Nursing: Accountability or Countability?" Nursing Outlook, 22(1): 21, Jan 1974.
64. Loewenstein, R., "Methodological Considerations in Quality Assessment," Graham, N., (Ed) Quality Assurance Hospitals. op. cit., pp37-41.
65. McClure, M.L., "The Long Road to Accountability," Nursing Outlook, 47-50, January, 1978.
66. McKenna, M.K., and Hales, P.W., "Application of the Nursing Process to Improve the Quality of Nursing Service Provided to a Military Community in Germany," Military Medicine, 558-561, Vol. 147, July, 1982.
67. Medical Record Abstract (Automated) SERVI-SHARE of Iowa, Inc., Des Moines, 1980.
68. Mental Health Administration - DHEW, Experimental Medical Care Review Organization (EMCRO) Programs, March, 1973, 196 pp.

69. Meredith, Jack, "Program Evaluation Techniques in the Health Services," American J. Public Health, 66(11): 1069-1073, Nov 1976
70. Miller, M.C., and Knapp R.G., Evaluating Quality of Care, Aspen Germantown, 1979, 333 pp.
71. Minetti, Robert C., "Computerized Nurse Staffing", Hospitals, 90, 92, July 16, 1983.
72. Misener, Terry R., Ambulatory Care Database, Report No. 83-009, HCSCIA, Fort Sam Houston, Texas, 1983.
73. Morehead, M.A., "The Medical Audit as an Operational Tool", in Graham N., (Ed), Quality Assurance in Hospitals, 1982, op. cit., pp 101-118.
74. Morehead, M.A., and Donaldson, R., "Quality of Clinical Management of Disease in Comprehensive Neighborhood Health Centers", Medical Care, 12: 301-315, 1974.
75. Nava, Sandra, "Documentation, of Quality Care for the Isolated Patient," Hospital Topics, 35-36, May/June, 1977.
76. Needed Research in the Assessment and Monitoring of the Quality of Medical Care, US Dept. of Health, Education, and Welfare, Public Health Service, National Center for Health Services Research, 1978.
77. New York University Medical Center, Hospital Information System, Undated.
78. P.L. 92-603, Title XI - General Provisions and Professional Standards Review, (ANAL of the 92nd Congress, - 2nd Session, 1671-1685, 1964):
79. Palmer, R.H., and Nesson, H.R., "A Review of Methods for Ambulatory Medical Care Evaluations," Medical Care, XX(8): 758-781, August, 1982.
80. Patient Incident Reporting System, The St. Paul Property and Liability Insurance Company.
81. Payne, B., and Lyons, T., "Methods of Evaluation and Improving Personal Medical Care Quality," Office Care Study, American Hospital Association, Chicago, 1978.
82. Peterson, S., "QA and the Credentialing Mechanism," Texas Hospitals, August 1983, pp. 21-22.
83. Primary Care Effectiveness Program Review Manual, US Dept. of Health and Human Services, Public Health Service, Wash. DC., May, 1980. 195pp.
84. Professional Activity Study, Commission on Professional and Hospital Activities (CPHA), Ann Arbor, Michigan, 48106.

85. Quality Review Bulletin (All Issues), JCAH.
86. Quality Review Bulletin, Special Edition, "Toward a Comprehensive Quality Assurance Program," The Journal of Quality Assurance (undated).
87. Reinhardt, V.E., Physician Productivity and the Demand for Health Manpower", Ballinger, Cambridge, 1975, 311pp.
88. Remmlinger, E., "Profile Analysis," in Graham, N., (Ed), Quality Assurance in Hospitals, 1982, op. cit. pp. 219-237.
89. Report of the Military Health Care Study, Dept. of Defense, Dept. of Health Education and Welfare, Office of Management and Budget, December, 1975.
90. Rosenberg, E.W., "What Kind of Criteria," in Graham, N., (Ed), Quality Assurance in Hospitals, 1982, op. cit., pp. 55-70.
91. _____, "Health Care Assessment: Choosing A Method," in Graham, N., (Ed), 1982, Quality Assurance in Hospitals, op. cit., 131-140.
92. Rubin, L., and Kellogg, M., "The Comprehensive Quality Assurance System," in Graham, N., (Ed), 1982, Quality Assurance in Hospitals, op. cit., pp. 199-218.
93. Rutstein, D.D., et al., "Measuring the Quality of Medical Care: A Clinical Method," in Graham, N., (Ed), Quality Assurance in Hospitals, 1982, op. cit., pp. 181-197.
94. Sadlow, C.A., (Director), Systems Analysis Study Toward A "New Generation of Military Hospitals", Westinghouse Health Systems, November 24, 1970, Vol. I-V.
95. San Francisco Peer Review Organization, Review Coordinator Manual, Oct, 1976.
96. Schwarz, A., "Evaluating Ambulatory Care," in Graham, N., (Ed), Quality Assurance in Hospitals, 1982, op. cit., pp. 81-100.
97. Second Opinions, Special Issue, "Understanding and Meeting the Quality Assurance Standard of the Joint Commission on Accreditation of Hospitals," Vol. 2: February 1981.
98. Study Group on Nursing Information Systems, Special Report, "Computerized Information Systems: An Urgent Need," Research in Nursing and Health, 6: 101-105, 1983.
99. Thompson, R.E., "A Method for Identifying Quality Assurance Issues/Problems," in Graham, N., (Ed), Quality Assurance in Hospitals, 1982, op. cit., pp. 71-78.

100. US Air Force, Quality of Medical Care Survey, August, 1982.
101. US Army Health Services Command, "Annual Historical Review, 1 April 1973 to 20 June 1975," Fort Sam Houston, Texas, 1 March 1978.
102. US Dept. of Health, Education, and Welfare, Public Services Bureau of Community Health Services, Primary Care Effectiveness: An Approach to Clinical Quality Assurance in BCHC Programs and Projects, April, 1980.
103. US Medicine, 1982, 15 July, "DOD Patient Outcomes Stressed," pp. 1, 26
_____, 1983a, 15 May, "Bill Would Allow Lawsuits by Active Duty Personnel," pp. 3, 10, 11.
_____, 1983b, 15 May, "Progress Notes."
_____, 1983c, 1 September, "Timetable Sought for Quality Review of Care in military," pp. 1, 7.
_____, 1983d, 15 September, "Thoracic Surgeons Report 'Questions' at Wilford Hall," pp. 1, 18.
104. US Navy, Health Care Quality Assurance/Risk Management Manual, Dept. of Medicine and Surgery, BUMEDINST 6320.62, BUMED-27, 29 May 1981.
105. Variance Report, Variance Reporting System SERVI-SHARE, 1981, Des Moines, IA.
106. Ventura, M.R., et al, "Correlations of Two Quality of Nursing Care Measures", Research in Nursing and Health, 37-43, 1982.
107. Veterans Administration, Health Services Review Organization Systematic External Review Program, Dept. of Medicine and Surgery, Wash. DC., July, 1980, 194 pp.
108. Veterans Administration, Health Services Review Organization Systematic External Review Program, Dept. of Medicine and Surgery, Wash. DC., October, 1981, 102 pp.
109. Wandelt, M.A., and Phaneuf, M.C., "Three Instruments for Measuring the Quality of Nursing Care," Hospital Topics, 20-23, 29. 1972.
110. Waters, K.A., and Murphy, G.F., Systems Analysis and Computer Applications in Health Information Management, Aspen, Rockville: 1983, 449 pp.
111. Weinberg, H., "Effecting Change in Hospital Performance: Issues and Realities," in Graham, N., (Ed), Quality Assurance in Hospitals. 1982, op. cit., pp. 277-283.

112. Weinberger, Casper, Letter to Secretaries of the Military Departments, Subject: Standards for Health Care Provider Performance. 1 Mar 1983, DOD, Wash. DC.

113. William Beaumont Army Medical Center, Regulation 40-66, "Medical Services Quality Assurance Program," 1 Jan 83., El Paso, TX.

114. Williamson, J.W., et al, "Health Accounting: An Outcome-Based System of Quality Assurance: Illustrative Application to Hypertension," in Graham, N., (Ed), 1982, op. cit. pp. 251-261.

115. Williamson, J.W., et al, Teaching Quality Assurance and Cost Containment In Health Care: A Faculty Guide, Jossey-Bass, San Francisco, 1982, 352pp.

116. Williamson, J.W., et al., Principals of Quality Assurance and Cost Containment in Health Care: A Guide for Medical Students, Residents, and other Health Professionals, Jossey-Bass, San Francisco, 1982, 146pp.

117. Womack Army Community Hospital, Clinical Record Quality Assurance Program, Fort Bragg, NC, 1982.

119. Zalar, R.W., Houston-Schrenzel, D., "Quality Assurance Plan for an Ambulatory Care Department", J. Ambulatory Care Management, 64-69, August 1982.

ANNEX A

Sample Reports Produced by the
Individual Patient Data System

SAMPLE REPORTS PRODUCED BY PATIENT ADMINISTRATION SYSTEMS
AND BIOSTATISTICS ACTIVITY

SAMPLE REPORTS PRODUCED BY PATIENT ADMINISTRATION SYSTEMS AND
BIOSTATISTICS ACTIVITY

INDEX

1. EXPLANATORY NOTES

2. SIGNAL EVENTS FOR DETERMINATION OF COMPLICATIONS OF MEDICAL CARE
SAMPLE ARMY MTF, CY 1982 (FREQUENCY)

3. NUMBER OF DISPOSITIONS AND BED DAYS BY PRIMARY DIAGNOSIS OF PATIENTS
WITH SIGNAL EVENTS FOR DETERMINATION OF COMPLICATIONS OF MEDICAL
CARE, SAMPLE ARMY MTF, CY 1982

4. SIGNAL EVENTS FOR DETERMINATION OF COMPLICATIONS OF MEDICAL CARE,
INPATIENT DEATHS, SAMPLE ARMY MTF, CY 1982

5. NUMBER OF DEATHS AND BED DAYS BY UNDERLYING CAUSE, INPATIENTS WITH
SIGNAL EVENTS FOR DETERMINATION OF COMPLICATIONS OF MEDICAL CARE,
SAMPLE ARMY MTF, CY 1982

6. SIGNAL EVENTS FOR DETERMINATION OF COMPLICATIONS OF MEDICAL CARE,
DISABILITY SEPARATIONS, SAMPLE ARMY MTF, CY 1982

7. DISABILITY SEPARATIONS AND BED DAYS BY UNDERLYING CAUSE, INPATIENTS
WITH SIGNAL EVENTS FOR DETERMINATION OF COMPLICATIONS OF MEDICAL CARE
SAMPLE ARMY MTF, CY 1982

8. SURGICAL PROCEDURES PERFORMED ON PATIENTS WITH SIGNAL EVENTS FOR
DETERMINATION OF COMPLICATIONS OF MEDICAL CARE,
SAMPLE ARMY MTF, CY 1982

9. SIGNAL EVENTS FOR DETERMINATION OF COMPLICATIONS OF MEDICAL CARE,
ALL PATIENTS BY CLINIC SERVICE, FORT SAMPLE
SAMPLE ARMY MEDICAL TREATMENT FACILITY, CY 1982

~~SAMPLE REPORTS PRODUCED BY PATIENT ADMINISTRATION SYSTEMS AND~~
~~BIostatistics ACTIVITY~~

~~EXPLANATORY NOTES:~~

~~1. REPORTS ARE BASED ON INPATIENTS AT A SAMPLE ARMY MEDICAL TREATMENT~~
~~FACILITY WITH ONE OR MORE OF THE SIGNAL EVENTS FOR DETERMINATION OF~~
~~COMPLICATIONS OF MEDICAL CARE CODED IN THE CLINICAL RECORD.~~

~~2. DATA EXCLUDE CARDED FOR RECORD ONLY (CRO) CASES. ARMY PERSONNEL IN~~
~~ABSENT SICK STATUS (IN A NON-MILITARY FACILITY FOR ENTIRE PERIOD~~
~~OF HOSPITALIZATION).~~

~~DATA DO NOT INCLUDE THOSE DIAGNOSES WHICH WERE TREATED AND CURED~~
~~PRIOR TO ADMISSION TO SAMPLE ARMY MEDICAL TREATMENT FACILITY.~~

~~THE MEAN IS THE AVERAGE DAYS OF HOSPITAL BED OCCUPANCY FOR EACH~~
~~DIAGNOSIS.~~

~~TOTAL DAYS ARE THE TOTAL NUMBER OF DAYS OF HOSPITAL BED OCCUPANCY.~~

~~THE UNDERLYING CAUSE IS THE DIAGNOSIS CODE DESIGNATED AS THE~~
~~UNDERLYING CAUSE OF DEATH OR DISABILITY SEPARATIONS.~~

~~3. ABBREVIATIONS:~~

~~DSPD DISPOSITION~~

~~DC CODE DIAGNOSIS CODE AS PUBLISHED IN THE NINTH REVISION~~
~~OF THE INTERNATIONAL CLASSIFICATION OF DISEASES (ICD9)~~

~~SOURCE: INDIVIDUAL PATIENT DATA SYSTEM (IPDS)~~

PCN: RUF-225

PAGE 1 SIGNAL EVENTS FOR DETERMINATION OF COMPLICATIONS OF MEDICAL CARE PROGRAM ID RUFT06
 SAMPLE ARMY MEDICAL TREATMENT FACILITY, CY 1982
 (EXCLUDES ABSENT SICK, CRO ABD CASES TREATED AND CURED AT ANOTHER MTF)

INCIDENCE
 DG CODE TITLE (ICD-9) FREQUENCY

1	0400	GAS GANGRENE	1
2	0410	STREP. INFECTION	50
3	0411	STAPH INFECTION	35
4	0412	PNEUMOCOCCAL INFCIN	3
5	0414	E COLI INFECTION	176
6	0417	PSEUDOMONAS INFECTION	25
7	0419	BACTERIAL INFECTION NOS	52
8	0703	HEPATITIS B VIRUS TEST POSITIVE	11
9	0704	HEPATITIS B VIRUS TEST NEGATIVE	1
10	0705	HEPATITIS B VIRUS TEST NOT PERFORMED	3
11	2765	DISORDERS OF FLUID VOLUME DEPLETION	207
12	2766	FLUID OVERLOAD	12
13	3490	REACTION TO SPINAL OR LUMBAR PUNCTURE	23
14	3493	TOXIC ENCEPHLOPATHY	4
15	4294	FUNCTIONAL DISTURANCES FOLLOWING CARDIAC SURGERY	13
16	5080	ACUTE PULMONARY MANIFESTATION FROM RADIATION	3
17	5081	CHRONIC PULMONARY MANIFESTATION FROM RADIATION	1
18	5199	DISEASE OF RESPIRATORY SYSTEM NOS	2

PREPARED BY:
 Department of the Army
 US Army Patient Administration Systems
 and Biostatistics Activity
 HSHI-QBP

PAGE 1 PCN RUF-225 NUMBER OF DISPOSITIONS AND BED DAYS BY PRIMARY DIAGNOSIS OF PATIENTS
WITH SIGNAL EVENTS FOR DETERMINATION OF COMPLICATIONS OF MEDICAL CARE
SAMPLE ARMY MEDICAL TREATMENT FACILITY, CY 1982

TOP 587 DIAGNOSES WITH
HIGHEST FREQUENCIES

RANK	DG CODE	DIAGNOSIS TITLE (ICD-9)	-- DAYS --		
			DSPO	TOTAL	MEAN
1	4292	CARDIOVASCULAR DISEASE, UNSPECIFIED	71	1178	16.59
2	4140	CORONARY ATHEROSCLEROSIS	67	1126	16.81
3	2765	VOLUME DEPLETION	66	473	7.17
4	9995	POSTOPERATIVE INFECTION	40	440	11.00
5	V300	SINGLE LIVE BORN, HOSPITAL	38	917	24.13
6	5990	URINARY TRACT INFECTION, SITE UNSPECIFIED	27	232	8.59
7	6643	4TH DEGREE LACERATION OF PERINEUM DURING DELIVERY	26	64	2.46
8	2183	UTERINE LEIOMYOMA	24	237	9.88
9	9981	HEMORRHAGE OR HEMATOMA COMPLICATING A PROCEDURE	22	140	6.36
10	6606	FAILED TRIAL OF LABOR, NOS	21	177	8.43
11	9463	MULTIPLE SPECIFIED BURNS, 3D DEGREE	19	1641	96.89
12	5580	OTHER NONINFECTIVE GASTROENTERITIS AND CULITIS	18	86	4.78
13	9779	POISONING BY DRUGS AND MEDICATIONS, UNSPECIFIED	17	53	3.12
14	6563	FETAL DISTRESS	17	130	7.65
15	1629	CANCER, BRONCHUS AND LUNG, UNSPECIFIED	16	401	25.06
16	9967	COMP OF INTERNAL PROSTHETIC DEVISE, IMPLANT AND GRAFT, NEC	15	112	7.47
17	9654	POISONING BY AROMATIC ANALGESICS, OTHER	14	36	2.57
18	4402	ATHEROSCLEROSIS OF ARTERIES OF THE EXTREMITIES	14	478	34.14
19	9983	DISRUPTION OF OPERATION WOUND	14	211	15.07
20	0799	UNSPECIFIED VIRAL INFECTION	14	42	3.00
21	6612	OTHER AND UNSPECIFIED UTERINE INERTIA	14	45	3.21
22	4241	AORTIC VALVE DISORDERS	13	317	24.38
23	1749	CANCER OF BREAST, FEMALE, UNSPECIFIED	13	170	13.69
24	9694	POISONING BY BENZODIAZEPINE-BASED TRANQUILIZERS	12	18	1.50
25	6262	EXCESSIVE OR FREQUENT MENSTRUATION	12	94	7.83
26	5509	INGUINAL HERNIA, W/O MENTION OF OBSTRUCTION OR GANGRENE	12	212	17.67
27	6695	FORCEPS OR VENTOUSE DELIVERY NOS	11	34	3.09
28	6581	PREMATURE RUPTURE OF MEMBRANES	11	92	8.36
29	9966	INFECTION, INFLAMMATION OF INTERNAL DEVISE, IMPLANT, GRAFT	11	321	29.19
30	4100	ACUTE MYOCARDIAL INFARCTION	11	246	22.36
31	9651	POISONING BY SALICYLATES	10	24	2.40
32	3960	DISEASES OF MITRAL AND AORTIC VALVES	10	299	29.90
33	6655	OTHER OBSTETRICAL INJURY TO PELVIC ORGANS	10	34	3.40
34	6424	MILD PRE-ECLAMPSIA	10	50	5.00
35	0703	HEPATITIS B, VIRUS TEST POSITIVE	9	39	4.33
36	5241	ANOMALIES OF RELATIONSHIP OF JAW TO CRANIAL BASE	9	86	9.56
37	9690	POISONING BY ANTIDEPRESSANTS	9	29	3.22
38	9963	MECHANICAL COMPLICATION, GENITOURINARY DEVISE, IMPLANT, GRAFT	9	36	4.00
39	6603	DEEP TRANSVERSE ARREST	9	36	4.00
40	9202	FRACTURE OF NECK OF FEMUR, PTEROCHANTERIC, CLOSED	9	358	39.78
41	5240	MAJOR ANOMALIES OF JAW SIZE	8	86	9.56
42	5400	ACUTE APPENDICITIS WITH GENERALIZED PERITONITIS	8	95	11.88
43	3970	REACTION TO SPINAL OR LUMBAR PUNCTURE	8	39	4.88
44	6256	STRESS INCONTINENCE, FEMALE	8	84	10.50
45	4331	OCCLUSION AND STENOSIS, CAROTID ARTERY	8	127	15.88
46	0088	INTESTINAL INFECTIONS, OTHER ORGANISM, NEC	8	31	3.88

PREPARED BY:
US Army Patient Administration
and Biostatistics Activity
Department of the Army
HSP-200

PCN: RUF-

PAGE 1 SIGNAL EVENTS FOR DETERMINATION OF COMPLICATIONS OF MEDICAL CARE PROGRAM ID RUFT06
INPATIENT DEATHS, FORT SAMP, CY 1982

INCIDENCE IC CODE	TITLE (ICD-9)	FREQUENCY
1 0414	E COLI INFECTION	6
2 0417	PSEUDOMONAS INFECTION	2
3 2765	DISORDERS OF FLUID VOLUME DEPLETION	5
4 2766	FLUID OVERLOAD	1
5 4294	FUNCTIONAL DISTURANCES FOLLOWING CARDIAC SURGERY	1
6 5199	DISEASE OF RESPIRATORY SYSTEM NOS	1
7 5642	POSTGASTRIC SURGERY SYNDROMES	2
8 5679	PERITONITIS NOS	5
9 5696	COLOSTOMY, ENTEROSTOMY MALFUNCTION	1
10 5731	HEPATITIS IN VIRAL DISEASE CLASSIFIED ELSEWHERE	1
11 7634	FETAL, NEWBORN MORBIDITY DUE TO CESAREAN DELIVERY	1
12 7670	SUBDURAL, CEREBRAL HEMORRHAGE AT BIRTH	1
13 7685	SEVERE ASPHYXIA, NB	3
14 7689	ASPHYXIA NOS, NB	1
15 9503	POST-TRAUMATIC WOUND INFECTION NEC	1
16 9654	POISONING, DRUGS, ANALGESICS NEC	1
17 9952	ADVERSE EFFECTS OF DRUGS NOS	3

PREPARED BY:
Department of the Army
US Army Patient Administration Systems
and Biostatistics Activity
HSBI-QGP

PAGE 1 PCN RUF- NUMBER OF DEATHS AND BED DAYS BY UNDERLYING CAUSE, INPATIENTS WITH SIGNAL EVENTS FOR DETERMINATION OF COMPLICATIONS OF MEDICAL CARE
SAMPLE ARMY MEDICAL TREATMENT FACILITY, CY 1982

RANK	CAUSE	DIAGNOSIS TITLE (ICD-9)	OSPO	-- DAYS --	
				TOTAL	MEAN
1	4100	ACUTE MYOCARDIAL INFARCTION	9	199	22.11
2	4140	CORONARY ATHEROSCLEROSIS	5	62	12.40
3	9463	MULTIPLE SPECIFIED BURNS, 3D DEGREE	4	281	70.25
4	4960	CHRONIC AIRWAYS OBSTRUCTION, NEC	4	119	29.75
5	7085	SEVERE ASPHYXIA, NEWBORN	3	25	8.33
6	9985	POSTOPERATIVE INFECTION	3	125	41.67
7	9471	CARDIAC COMPLICATIONS DUE TO PROCEDURE	3	39	13.00
8	4019	HYPERTENSIVE RENAL DISEASE, UNSPECIFIED	2	47	24.50
9	5990	URINARY TRACT INFECTION, SITE UNSPECIFIED	2	21	10.50
10	7104	PRIMARY ATELECTASIS	2	2	1.00
11	3940	MITRAL STENOSIS	2	14	7.00
12	3960	DISEASES OF MITRAL AND AORTIC VALVES	2	35	17.50
13	9462	MULTIPLE SPECIFIED BURNS, 2D DEGREE	2	11	5.50
14	5712	ALCOHOLIC CIRRHOSIS LIVER	2	57	28.50
15	4292	CARDIOVASCULAR DISEASE, UNSPECIFIED	2	15	7.50
16	1440	CANCER OF FLOOR OF MOUTH, ANTERIOR PORTION	1	26	26.00
17	2001	LYMPHOSARCOMA	1	20	20.00
18	3441	RHEUMATIC MITRAL INSUFFICIENCY	1	16	16.00
19	1749	CANCER OF BREAST, FEMALE, UNSPECIFIED	1	18	18.00
20	1623	CANCER, UPPER LOBE, BRONCHUS OR LUNG	1	39	39.00
21	3942	MITRAL STENOSIS WITH INSUFFICIENCY	1	1	1.00
22	1729	MELANOMA OF UNSPECIFIED SITE	1	30	30.00
23	4275	CARDIAC ARREST	1	35	35.00
24	4349	OCCLUSION OF CEREBRAL ARTERIES, UNSPECIFIED	1	23	23.00
25	4412	AORTIC ANEURYSM, THORACIC	1	29	29.00
26	4824	PNEUMONIA DUE TO STAPHYLOCOCCUS	1	28	28.00
27	1798	CANCER, MULTIPLE PARTS OF ORAL CAVITY	1	27	27.00
28	0709	VIRAL HEPATITIS, NOS	1	12	12.00
29	5324	DUODENAL ULCER, CHRONIC OR NOS WITH HEMORRHAGE	1	14	14.00
30	1679	CANCER, BRONCHUS AND LUNG, UNSPECIFIED	1	70	70.00
31	1719	CANCER, CONNECTIVE AND OTHER SOFT TISSUE, UNSPECIFIED	1	4	4.00
32	5679	PERITONITIS NOS	1	1	1.00
33	5676	COLONOSTOMY, ENTEROSTOMY MALFUNCTION	1	1	1.00
34	1539	CANCER, COLON, UNSPECIFIED	1	7	7.00
35	5713	ALCOHOLIC LIVER DAMAGE, NOS	1	2	2.00
36	2127	BENIGN NEOPLASM, HEART	1	25	25.00
37	7452	TETRALOGY OF FALLOT	1	14	14.00
38	7456	ENDOCARDIAL CUSHION DEFECTS	1	3	3.00
39	7463	CONGENITAL STENOSIS OF AORTIC VALVE	1	13	13.00
40	5070	PNEUMONITIS DUE TO INHALATION OF FOOD OR VOMIT	1	29	29.00
41	7690	RESPIRATORY DISTRESS SYNDROME	1	1	1.00
42	5379	DUODENAL ULCER, NOS	1	6	6.00
43	5400	ACUTE APPENDICITIS WITH GENERALIZED PERITONITIS	1	13	13.00
44	4242	TEICUSPID VALVE DISORDERS, SPECIFIED AS NONRHEUMATIC	1	4	4.00
45	9654	POISONING BY AROMATIC ANALGESICS, OTHER	1	4	4.00
46	2070	RETICULOSARCOMA	1	25	25.00

PREPARED BY:

Department of the Army

Medical Administration System
Statistics Activity

PCN: RUF-

PAGE 1 SIGNAL EVENTS FOR DETERMINATION OF COMPLICATIONS OF MEDICAL CARE PROGRAM ID RUFT06
DISABILITY SEPARATIONS, FORT SAMPLE, CV 1982
INCLUDES CRU

INCIDENCE CG CODE	TITLE (ICD-9)	FREQUENCY
1 0411	STAPH INFECTION	1
2 0414	E COLI INFECTION	1
3 9583	POST-TRAUMATIC WOUND INFECTION NEC	2
4 9651	POISONING BY SALICYLATES	1
5 9670	POISONING BY BARBITURATES	1
6 9952	ADVERSE EFFECTS OF DRUGS NOS	1
7 9970	CENTRAL NERVOUS SYS COMPLICATIONS DUE TO PROCEDURE	2
8 9972	PERIPHERAL VASCULAR COMPLICATIONS DUE TO PROCEDURE	1
9 9979	COMPLICATIONS AF- FECTING UTH SPECI- FIED BODY SYS NEC	1
10 9991	HEMORRHAGE OR HEM- ATOMA COMPLICATING A PROCEDURE	2
11 9992	ACCIDENTAL PUNC- TURE OR LACERATION DURING A PROCEDURE	1
12 9994	FOREIGN BODY LEFT DURING PROCEDURE	1
13 9995	POSTOP INFECTION	1
14 9998	OTHER SPECIFIED COMPLICATIONS OF PROCEDURES NEC	1
15 9998	OTHER TRANSFUSION REACTION	1
TOTAL		18

PREPARED BY:
Department of the Army
US Army Patient Administration Systems
and Biostatistics Activity
HSHT-QBP

PAGE 1 PCN REF- DISABILITY SEPARATIONS AND BED DAYS BY UNDERLYING CAUSE, INPATIENTS WITH
SIGNAL EVENTS FOR DETERMINATION OF COMPLICATIONS OF MEDICAL CARE
SAMPLE ARMY MEDICAL TREATMENT FACILITY, CY 1982

UNDERLYING		DIAGNOSIS TITLE (ICD-9)	OSPO	-- DAYS --		TOP 14 DIAGNOSES WITH HIGHEST FREQUENCIES
RANK	CAUSE			TOTAL	MEAN	
1	9463	MULTIPLE SPECIFIED BURNS, 3D DEGREE	3	549	183.00	
2	1712	CANCER, CONNECTIVE, SOFT TISSUE, UPPER LIMB, INCLUDING SHOULDER	1	39	39.00	
3	2000	RETICULOSARCOMA	1	91	91.00	
4	1629	CANCER, BRONCHUS AND LUNG, UNSPECIFIED	1	56	56.00	
5	2251	BENIGN NEOPLASM, CRANIAL NERVES	1	140	140.00	
6	2930	ACUTE CONFUSIONAL STATE	1	126	126.00	
7	2050	MYELOID LEUKEMIA, ACUTE	1	14	14.00	
8	2954	ACUTE SCHIZOPHRENIC EPISODE	1	63	63.00	
9	4140	CORONARY ATHEROSCLEROSIS	1	17	17.00	
10	5559	REGIONAL ENTERITIS, SITE NOS	1	190	190.00	
11	7159	OSTEOARTHRITIS, NOS	1	272	272.00	
12	7227	INTERVERTEBRAL DISC DISORDER WITH MYELOPATHY	1	2	2.00	
13	7478	CONGENITAL ANOMALY OF CIRCULATORY SYSTEM, NEC	1	20	20.00	
14	2953	SCHIZOPHRENIA, PARANOID TYPE	1	57	57.00	
TOTAL			16	1636	102.25	

REPORT BY:
Department of the Army
US Army Patient Administration Systems
and Biostatistics Activity
USAMRIID-QBP

PCN: AUF-

PAGE 1 SURGICAL PROCEDURES PERFORMED ON PATIENTS WITH SIGNAL EVENTS FOR
DETERMINATION OF COMPLICATIONS OF MEDICAL CARE, SAMPLE ARMY MIF, 1982
(EXCLUDES ABSENT SICK, CRO CASES AND TREATED AND CURED.) PROGRAM ID RUFT07

484 TOP SURGERIES

UP CODE	TITLE (ICPM)	FREQUENCY
1 1519	RADIOISOTOPE SCANS, FUNCTION STUDY	224
2 3619	DIAGNOSTIC ULTRA- SOUND	158
3 5361	BYPASS ANASTOMOSIS FOR HEART REVASCU- LARIZATION	136
4 3440	COMPUTERIZED AXIAL TOMOGRAPHY OF HEAD	133
5 8961	MONITORING FETAL HEART DURING LABOR	127
6 5758	REPAIR OTHER OB- STETRIC LACERATION	115
7 5093	OTHER FREE SKIN GRAFTS	107
8 3443	OTHER COMPUTERIZED AXIAL TOMOGRAPHY	81
9 5883	SURGICAL TREAT OF WOUND OR INFECTED TISSUE	80
10 5721	LOW FORCEPS DELI- VERY W EPISIOTOMY	74
11 5882	OTHER INCISION OF SKIN AND SURGU- TANEOUS TISSUE	71
12 5083	TOTAL ABDOMINAL HYSTERECTOMY	66
13 1272	CENTRAL VENOUS PRESSURE MEASURE	66
14 3251	INTRAVENOUS UROGRAPHY	61
15 8839	OTHER CATHETERI- ZATION OR CANNULA- TION OF VESSEL	49

PREPARED BY:
Department of the Army
US Army Patient Administration Systems
and Biostatistics Activity
HSHI-QPP

NUMBER OF DISPOSITIONS BY CLINIC SERVICE, ALL PATIENTS
 SAMPLE ARMY MEDICAL TREATMENT FACILITY, CY 1982
 (EXCLUDES CRO AND ABSENT SICK)

CLINIC SERVICE	TOTAL OSPO	SIGNAL EVENTS	
		OSPO	PERCENT
INTERNAL MEDICINE	1844	247	13.39
CARDIOLOGY	1513	78	5.16
DERMATOLOGY	34	1	2.94
ENDOCRINOLOGY	29	0	-
GASTROENTEROLOGY	2024	93	4.59
HEMATOLOGY	2	0	-
NEPHROLOGY	52	12	23.08
NEUROLOGY	712	36	5.04
ONCOLOGY	578	85	14.71
PUL/UP RESP DISEASE	282	10	3.55
RHEUMATOLOGY	6	0	-
ALLERGY-IMMUNOLOGY	1	0	-
SURG-GENERAL	1974	170	8.61
SURG-CARDIO/THORAC	456	179	39.25
SURG-NEUROLOGIC	334	17	5.09
SURG-ORAL	177	37	20.90
SURG-PLASTIC	256	8	3.13
PAEDIATOLOGY	2	0	-
UROLOGY	342	55	16.11
SURG-HAND	15	2	13.33
SURG-PERIPHERAL VAS	63	8	12.70
GYNECOLOGY	1355	170	12.55
OBSTETRICS	1218	214	17.57
PEDIATRICS	925	118	12.76
NURSERY (NEWBORN)	1003	39	3.89
ADOLESCENT PED	9	2	22.22
ORTHOPEDICS	1588	100	6.30
PODIATRY	103	5	5.83
PSYCHIATRY	536	10	1.87
OPHTHALMOLOGY	513	21	4.09
OTORHINOLARYNGOLOGY	790	38	4.81
OTHER (CODE XX)	235	24	10.21
TOTAL	19566	1786	9.13

ANNEX B
Ambulatory Care Database

procedures performed, status for eligibility for care, referrals, and disposition (to include whether the diagnosis was job related), and diagnostic data. The overall needs of the Army mandated that diagnostic information be a priority element in the database. Several outpatient diagnostic codes were reviewed and the International Classification of Health Problems in Primary Care (IC-PPC-2) was selected. The codes were simple to use; had previously been used for a family practice database; and they were truncations of the ICD-9. The encounter form allowed the provider to select one of 371 diagnostic codes as the primary reason for seeing a patient on a particular visit. One primary diagnosis was required and the provider was allowed to select up to five secondary diagnoses germane to a particular visit. "Diagnoses" could be a sign, symptom, questionable laboratory findings, or a series of wellness oriented reasons for care. (Fig. 2.)

IC-PPC-2 DIAGNOSES	
PRIMARY OR ADDITIONAL	INFECTIVE & PARASITIC DISEASE
000	PROVIDER SELECTS NO DISEASE
001	RESUMED PREVIOUS DISEASE
002	TUBERCULOSIS
003	STREP THROAT
004	STREP THROAT
005	STREP THROAT
006	STREP THROAT
007	STREP THROAT
008	STREP THROAT
009	STREP THROAT
010	STREP THROAT
011	STREP THROAT
012	STREP THROAT
013	STREP THROAT
014	STREP THROAT
015	STREP THROAT
016	STREP THROAT
017	STREP THROAT
018	STREP THROAT
019	STREP THROAT
020	STREP THROAT
021	STREP THROAT
022	STREP THROAT
023	STREP THROAT
024	STREP THROAT
025	STREP THROAT
026	STREP THROAT
027	STREP THROAT
028	STREP THROAT
029	STREP THROAT
030	STREP THROAT
031	STREP THROAT
032	STREP THROAT
033	STREP THROAT
034	STREP THROAT
035	STREP THROAT
036	STREP THROAT
037	STREP THROAT
038	STREP THROAT
039	STREP THROAT
040	STREP THROAT
041	STREP THROAT
042	STREP THROAT
043	STREP THROAT
044	STREP THROAT
045	STREP THROAT
046	STREP THROAT
047	STREP THROAT
048	STREP THROAT
049	STREP THROAT
050	STREP THROAT
051	STREP THROAT
052	STREP THROAT
053	STREP THROAT
054	STREP THROAT
055	STREP THROAT
056	STREP THROAT
057	STREP THROAT
058	STREP THROAT
059	STREP THROAT
060	STREP THROAT
061	STREP THROAT
062	STREP THROAT
063	STREP THROAT
064	STREP THROAT
065	STREP THROAT
066	STREP THROAT
067	STREP THROAT
068	STREP THROAT
069	STREP THROAT
070	STREP THROAT
071	STREP THROAT
072	STREP THROAT
073	STREP THROAT
074	STREP THROAT
075	STREP THROAT
076	STREP THROAT
077	STREP THROAT
078	STREP THROAT
079	STREP THROAT
080	STREP THROAT
081	STREP THROAT
082	STREP THROAT
083	STREP THROAT
084	STREP THROAT
085	STREP THROAT
086	STREP THROAT
087	STREP THROAT
088	STREP THROAT
089	STREP THROAT
090	STREP THROAT
091	STREP THROAT
092	STREP THROAT
093	STREP THROAT
094	STREP THROAT
095	STREP THROAT
096	STREP THROAT
097	STREP THROAT
098	STREP THROAT
099	STREP THROAT
100	STREP THROAT
101	STREP THROAT
102	STREP THROAT
103	STREP THROAT
104	STREP THROAT
105	STREP THROAT
106	STREP THROAT
107	STREP THROAT
108	STREP THROAT
109	STREP THROAT
110	STREP THROAT
111	STREP THROAT
112	STREP THROAT
113	STREP THROAT
114	STREP THROAT
115	STREP THROAT
116	STREP THROAT
117	STREP THROAT
118	STREP THROAT
119	STREP THROAT
120	STREP THROAT
121	STREP THROAT
122	STREP THROAT
123	STREP THROAT
124	STREP THROAT
125	STREP THROAT
126	STREP THROAT
127	STREP THROAT
128	STREP THROAT
129	STREP THROAT
130	STREP THROAT
131	STREP THROAT
132	STREP THROAT
133	STREP THROAT
134	STREP THROAT
135	STREP THROAT
136	STREP THROAT
137	STREP THROAT
138	STREP THROAT
139	STREP THROAT
140	STREP THROAT
141	STREP THROAT
142	STREP THROAT
143	STREP THROAT
144	STREP THROAT
145	STREP THROAT
146	STREP THROAT
147	STREP THROAT
148	STREP THROAT
149	STREP THROAT
150	STREP THROAT
151	STREP THROAT
152	STREP THROAT
153	STREP THROAT
154	STREP THROAT
155	STREP THROAT
156	STREP THROAT
157	STREP THROAT
158	STREP THROAT
159	STREP THROAT
160	STREP THROAT
161	STREP THROAT
162	STREP THROAT
163	STREP THROAT
164	STREP THROAT
165	STREP THROAT
166	STREP THROAT
167	STREP THROAT
168	STREP THROAT
169	STREP THROAT
170	STREP THROAT
171	STREP THROAT
172	STREP THROAT
173	STREP THROAT
174	STREP THROAT
175	STREP THROAT
176	STREP THROAT
177	STREP THROAT
178	STREP THROAT
179	STREP THROAT
180	STREP THROAT
181	STREP THROAT
182	STREP THROAT
183	STREP THROAT
184	STREP THROAT
185	STREP THROAT
186	STREP THROAT
187	STREP THROAT
188	STREP THROAT
189	STREP THROAT
190	STREP THROAT
191	STREP THROAT
192	STREP THROAT
193	STREP THROAT
194	STREP THROAT
195	STREP THROAT
196	STREP THROAT
197	STREP THROAT
198	STREP THROAT
199	STREP THROAT
200	STREP THROAT
201	STREP THROAT
202	STREP THROAT
203	STREP THROAT
204	STREP THROAT
205	STREP THROAT
206	STREP THROAT
207	STREP THROAT
208	STREP THROAT
209	STREP THROAT
210	STREP THROAT
211	STREP THROAT
212	STREP THROAT
213	STREP THROAT
214	STREP THROAT
215	STREP THROAT
216	STREP THROAT
217	STREP THROAT
218	STREP THROAT
219	STREP THROAT
220	STREP THROAT
221	STREP THROAT
222	STREP THROAT
223	STREP THROAT
224	STREP THROAT
225	STREP THROAT
226	STREP THROAT
227	STREP THROAT
228	STREP THROAT
229	STREP THROAT
230	STREP THROAT
231	STREP THROAT
232	STREP THROAT
233	STREP THROAT
234	STREP THROAT
235	STREP THROAT
236	STREP THROAT
237	STREP THROAT
238	STREP THROAT
239	STREP THROAT
240	STREP THROAT
241	STREP THROAT
242	STREP THROAT
243	STREP THROAT
244	STREP THROAT
245	STREP THROAT
246	STREP THROAT
247	STREP THROAT
248	STREP THROAT
249	STREP THROAT
250	STREP THROAT
251	STREP THROAT
252	STREP THROAT
253	STREP THROAT
254	STREP THROAT
255	STREP THROAT
256	STREP THROAT
257	STREP THROAT
258	STREP THROAT
259	STREP THROAT
260	STREP THROAT
261	STREP THROAT
262	STREP THROAT
263	STREP THROAT
264	STREP THROAT
265	STREP THROAT
266	STREP THROAT
267	STREP THROAT
268	STREP THROAT
269	STREP THROAT
270	STREP THROAT
271	STREP THROAT
272	STREP THROAT
273	STREP THROAT
274	STREP THROAT
275	STREP THROAT
276	STREP THROAT
277	STREP THROAT
278	STREP THROAT
279	STREP THROAT
280	STREP THROAT
281	STREP THROAT
282	STREP THROAT
283	STREP THROAT
284	STREP THROAT
285	STREP THROAT
286	STREP THROAT
287	STREP THROAT
288	STREP THROAT
289	STREP THROAT
290	STREP THROAT
291	STREP THROAT
292	STREP THROAT
293	STREP THROAT
294	STREP THROAT
295	STREP THROAT
296	STREP THROAT
297	STREP THROAT
298	STREP THROAT
299	STREP THROAT
300	STREP THROAT
301	STREP THROAT
302	STREP THROAT
303	STREP THROAT
304	STREP THROAT
305	STREP THROAT
306	STREP THROAT
307	STREP THROAT
308	STREP THROAT
309	STREP THROAT
310	STREP THROAT
311	STREP THROAT
312	STREP THROAT
313	STREP THROAT
314	STREP THROAT
315	STREP THROAT
316	STREP THROAT
317	STREP THROAT
318	STREP THROAT
319	STREP THROAT
320	STREP THROAT
321	STREP THROAT
322	STREP THROAT
323	STREP THROAT
324	STREP THROAT
325	STREP THROAT
326	STREP THROAT
327	STREP THROAT
328	STREP THROAT
329	STREP THROAT
330	STREP THROAT
331	STREP THROAT
332	STREP THROAT
333	STREP THROAT
334	STREP THROAT
335	STREP THROAT
336	STREP THROAT
337	STREP THROAT
338	STREP THROAT
339	STREP THROAT
340	STREP THROAT
341	STREP THROAT
342	STREP THROAT
343	STREP THROAT
344	STREP THROAT
345	STREP THROAT
346	STREP THROAT
347	STREP THROAT
348	STREP THROAT
349	STREP THROAT
350	STREP THROAT
351	STREP THROAT
352	STREP THROAT
353	STREP THROAT
354	STREP THROAT
355	STREP THROAT
356	STREP THROAT
357	STREP THROAT
358	STREP THROAT
359	STREP THROAT
360	STREP THROAT
361	STREP THROAT
362	STREP THROAT
363	STREP THROAT
364	STREP THROAT
365	STREP THROAT
366	STREP THROAT
367	STREP THROAT
368	STREP THROAT
369	STREP THROAT
370	STREP THROAT
371	STREP THROAT

Figure 2

Along with the demographics, the diagnostic information provides the heart of the epidemiological data. These data also provide the MEDDAC the ability to carry out peer review and retrospective chart audits in a valid and objective manner. The basis for epidemiological studies by the occupational health physician are a function of occupational series, codes, and the employee's building location. Also, the form allowed for documentation when more than one provider saw a patient. For example, if a patient were to be

first seen by a physicians' assistant, a nurse practitioner, or a general medical officer and then were to be subsequently seen by another provider (e.g., a specialty physician), both individuals would be credited with having seen the patient.

Finally, it should be noted that several of the elements on the sample encounter form reflected the unique requests of the studied medical treatment facility. An example is the field indicating whether an exam was chaperoned.

A one-day pilot test of the instrument was carried out at an independent Army treatment facility. Twenty nurse practitioners used the proposed encounter form to note any difficulty in tracking or use of the form. Subsequently, minor form and instruction sheet changes were made.

Prior to implementation of the study, three sets of instructions were prepared, one set for each of the following: providers, patients, and clerical staff. Patients were asked to complete most of the demographic data which was then checked for completeness and accuracy by the clinic staff. The clinic staff entered the clinic identifier, family member prefix (to identify the household position of the patient), appointment status, time in and time out. The remainder of the form was completed by providers and was monitored for completeness by the clerical staff. The patient portion of the form could be completed in about two minutes. The provider data was entered in about 30 seconds, especially after the providers became familiar with frequently used diagnoses. Clerical staff needed about 30 seconds to check and complete each form. Staff training began two weeks before the collection of hard data. This gave personnel the opportunity to use forms in a practice setting.

On November 1, 1982 the six months of data collection began. It was expected that about 60,000 forms would be completed. By the end of March, over 55,000 forms were entered into the database. After the encounter forms were completed and checked for obvious errors, they were taken to a central point in the administrative department of the MEDDAC where one of three persons had been trained to process the records. Up to 500 forms per hour can be read by the particular table top reader being used for the test. The first time records were read they were scanned only; that is, errors were identified by a program in the edit routine. Forms containing errors were returned to the clinic staff for correction and re-editing. Error-free forms were read by the scanner and output onto seven inch magnetic tape. Data could be transferred on-line to a host computer or off-loaded onto a micro-computer; however, the tape method was chosen to be compatible with the goal of decentralization and minimal cost.

The tapes were then transferred to the installation computer facility where they were mailed or sent via telecommunications to Fort Sam Houston, Texas. Ideally, the data would be handled locally in a completely decentralized

fashion; however, for the six month study, it was not reasonable to request the post to increase its workload. Instead, it was decided that data analysis and report generation would take place in the principal investigator's office.

Data received at the Fort Sam Houston computer facility comprised a 696 column record. A compression program was written to turn out a more parsimonious 220 character record which was then merged with SPSS (Statistical Package for the Social Sciences) for report generation and data manipulation. SPSS is not the ideal method for data analysis; however, it was an available package minimizing the need for programming. Ideally, a local program would be written compatible with the individual installation host computer so that reports and data manipulation could be carried out on site.

Results

One of the major concerns at the outset of the study was that the providers would not complete the forms as requested. At the end of the study, with over 55,000 records in the database, the encounter forms are being completed as a result of command emphasis and provider derived benefits. The second study question was: what reports can be generated from the data? Examination of the data collection forms demonstrate the potential reports and tables that can be generated. Both aggregate and individual provider reports have been developed. Since provider participation was of utmost importance and because they had been promised that they would receive monthly profiles of their practice, this was the first priority.

Reports were prepared on a monthly basis for each provider including physicians, social workers, nurses, and medics working in the screening clinics. The reports include: a list of all primary diagnoses and the frequency of each diagnoses, procedures reported, demographic data to include age category by diagnoses, beneficiary status of patients, the number and types of exams done, average time per patient seen, and a list of secondary diagnoses.

Using a diagnostic cluster technique which is a further truncation of the ICHPPC-2 codes, it is possible to rapidly assess the diagnoses/problems which consume the majority of outpatient services (Schneeweiss et al., 1983). For example, 20 diagnostic clusters account for 75.2% of all outpatient encounters at Redstone during January, 1983.

Additionally, monthly aggregate reports useful to management are prepared and include: the number of patients seen in each clinic, the number of forms completed by each provider, the average time a patient spends in each clinic, the information for the medical summary report, and the number of exams chaperoned per clinic. Individual requests for unique reports have also been handled. For example, the occupational health physician was interested in the number of job related physical examinations performed.

Discussion

Several lessons have been learned from the test. From the outset the procedures list was recognized as far from complete; however, it contained those procedures the medical staff at the study site stated they wanted to capture. Having a prepared menu of procedures did not require the provider to look up entries from a code table. However, experience has shown that about 25% of the procedures are reported in the "other" category which is not acceptable. In any future form design it would be advisable to include a list of common procedures, and to also provide spaces where less common procedures could be entered from tables, therefore, providing the best of both methods.

No one page form can meet the needs of every clinic. It is suggested that several forms be developed for differing specialties (e.g., pediatrics, obstetrics, occupational medicine, walk-in clinic, etc.).

For the system to work, the need for command emphasis is obvious. Less obvious is the need for public relations and marketing with providers. It cannot be overstated that for the system to be functioning at its optimal level, it must be symbiotic. Providers must believe that it has something to offer to them.

In the future, it would be desirable that a system such as this be interposed with a central appointment system. When a patient makes an appointment, the system would do three things: 1) create a chart pull-list, 2) create a problem list which would include the patient's list of current problems along with the first date they were seen for the problem; how many times they had been seen for the problem; and when they were seen last for the problem, 3) an encounter form could be "preslugged" with data from the registered patient's database precluding the regathering of known information. However, a completely manual system such as that which has been reported here is needed for back-up when the system is "down" and for the walk-in patient as well as patients who are seen outside the main treatment facility in a remote site clinic or mobile health delivery unit.

Conceptually, it would also be possible for the system to be connected to a word processing program whereby the provider's routine medical record entry could be generated from the encounter form. Additional narrative could be dictated and merged with the encounter data using the lithocode on each encounter form.

Summary

The overall objectives of the study have been met. It has been demonstrated that the providers will complete their portion of the encounter form. The data are auditable and provide the basis for peer review. Secondly, the number of reports that can be developed from the data are limited only by the user's imagination. It has been recommended that this inexpensive, and reliable data

collection methodology be implemented on a worldwide basis by the Army. In fact, members of the Air Force and Navy have also seen the benefits of such a system for use on a tri-service level.

References

1. ICHPPC-2: International Classification of Health Problems in Primary Care, 2d ed. New York, Oxford University Press, 1979.

2. Schneeweiss, et al. Diagnostic Clusters: A New Tool for Analyzing the Content of Ambulatory Medical Care. Medical Care 1983; 21:105.

Best Available Copy

ANNEX C

Extract of Clinical Record QA Program,
Womack Army Community Hospital

PREFACE

The overall goal of the proposed system is to insure accomplishment of the objectives of Quality Assurance in the most cost-effective and efficient manner.

The current program involves the review of clinical records of discharged patients by medical record analysts using one set of predetermined criteria (Surgical Case Review), personal knowledge and judgement. Selected inpatient clinical records are combined with randomly retrieved and/or selected outpatient treatment/health records for Quality Assurance review by all care providers (physicians, nurses, therapists, etc). All death cases, complications, and hospital infections are routinely forwarded for committee review (inpatient and outpatient records reviewed each month total 650-700). There is presently no capability to consistently identify patterns of care by either area of care, practitioner or problem.

Womack Army Community Hospital objectives include limiting the total number of clinical records to be reviewed by providers to those that reveal some item of previously designated interest. Achievement of this objective would greatly reduce the health care provider's time spent in potentially nonproductive record review. More practical and efficient use of provider time in problem identification, assessment and resolution would enhance patient care and should improve the actual assessment of care extended by individual providers. Another objective of the proposed system is to create a historical data base from which trends, patterns of care, admitting and discharging habits and other data can be retrieved.

This program will support all established hospital committees, as well as proposed indices. The program will also be useful for research purposes. A complete listing is attached.

The data resulting from the Clinical Record Quality Assurance Program is a tool. It does not in and of itself solve problems; it provides clues to problems and/or solutions. Patient care is exceedingly complex and such data can be misleading if not thoroughly analyzed by appropriate staff personnel.

COMMITTEES AND INDICES SUPPORTED BY CLINICAL RECORD QUALITY ASSURANCE PROGRAM

1. Physician's Index
2. Capture and monitoring of patient care elements
3. Consultations accomplished by Service/Department and/or Clinician

COMMITTEES ASSISTED:

1. Drug utilization/antibiotic review
2. Surgical case review
3. Transfusion/blood utilization review
4. Each Service/Clinic/Department Medical Care Evaluation Committee
(WACH = 28 in number not including outpatient areas)
5. Risk Management
6. Safety Committee
7. Hospital Mortality/Morbidity Committee(s)
8. Credentials
9. Medical Intensive Care/Surgical Intensive Care Unit Committees
10. Utilization Review Program
11. Infection Control Committee
12. Respiratory Care
13. Department of Pathology
14. Radiology Service
15. Medical Record Committee
16. Patient Administration Division Quality Assurance (Medical Record, analysts)
17. Hospital Medical Care Evaluation Committee (Accepts and reviews minutes from other committees; recommends action to Executive Committee)
18. Executive Committee

CLINICAL RECORD QUALITY ASSURANCE PROGRAM

AVAILABLE REPORTS

NOTE: Individual reports available monthly, quarterly, semiannually or annual on request.

Patients are identified by register number. Most reports will be furnished to involved Services and Departments

DISTRIBUTION: NEED TO KNOW

AVAILABLE REPORTS

REPORT

DISTRIBUTION

MONTHLY

- | | |
|---|--|
| 1. Listing of death cases | 1. C, CS 2. Chiefs of involved Svc/Depts
3. PAD |
| 2. Listing of hospital acquired infections | 1. C, CS 2. Chiefs, involved Svc/Depts
3. PAD |
| 3. Listing of hospital related complications | 1. C, CS 2. Chiefs, involved Svc/Depts
3. PAD |
| 4. Listing of documented evidence of patient dissatisfaction | 1. C, CS 2. Chiefs, involved Svc/Depts
3. PAD |
| 5. Listing of patients leaving AMA | 1. C, CS 2. Chiefs, involved Svc/Depts
3. PAD |
| 6. Surgical Case Review | 1. Chairman, Tissue Committee 2. PAD |
| 7. Report of Informed Consent | 1. C, CS 2. Chiefs, involved Svc/Depts
3. Chairman, Risk Management Committee
4. PAD |
| 8. Blood Utilization Review | 1. Chairman, Transfusion Committee 2. PAD |
| 9. Listing of patients readmitted for same/related diagnosis | 1. Chiefs, involved Svc/Dept 2. PAD |
| 10. Listing of patients with documented alcohol/drug/psychosis/combo use on admission | 1. C, CS 2. Chiefs, involved Svc/Dept
3. Chief, Operation Awareness 4. C, P&N (if not included in #2)
5. PAD |

Subcategories

Number of cases each Svc/Dept
Number of cases each nursing unit
Number of cases - alcohol
Number of cases - drug
Number of cases - psychosis
Number of cases - combination

Comparison- with discharge status

Breakdown comparison with Operation Awareness consultations (#25)

AVAILABLE REPORTS

REPORT

DISTRIBUTION

11. Listing of patients managed with seclusion and/or restraints

1. C, P&N 2. PAD

Compare this report with previous report

12. Listing of consultations

By Svc/Clinic
By physician

1. C, CS 2. Chiefs,
involved Svc/Dept
3. PAD

13. Listing of patients (register numbers) admitted through Emergency Room

1. C, EMS 2. PAD
3. C,CS

14. Listing of patients (register numbers) when Emergency Room diagnosis and final diagnosis do not agree

1. C, CS 2. C, EMS 3. PAD

NOTE: In progress: retrieval of time
of day of arrival in ER compared
to time of admission

15. Listing of register numbers lacking comprehensive progress note

SVC/DEPT
MD

1. C, CS 2. Chiefs,
involved Svc/Dept
3. PAD

16. Listing of patients (register numbers) of newborn* infants with Apgar scores less than _____

1. C, Peds 2. PAD

17. Listing of patients (register numbers) of newborn infants requiring use of oxygen*

1. C, Peds 2. PAD

* Newly born this facility this admission

QUARTERLY

Any of the above are available quarterly as well as monthly

18. Listing of register numbers of hospital profile for high risk diagnoses

AVAILABLE REPORTS

QUARTERLY

REPORT

19. Listing of patients admitted to
Special Care units

Breakdown by unit to which admitted:

Admitting diagnosis
Final (discharge) diagnosis
Number of days in unit
Number of days hospitalized

Note: The above captured and reported by register
number

Subcategory by request

Cases by Svc/Dept
Cases by MD
Types of Management Services
Laboratory/radiology studies
Medications
Surgical procedures performed

20. Listing of unexpected transfers from general
care bed to specific special care unit

DISTRIBUTION

1. C, CS 2. Chiefs,
involved Svc/Dept
3. PAD

1. C, CS 2. Chiefs,
involved Svc/Dept
3. PAD

SPECIAL - UPON REQUEST REPORTS

21. Antibiotic Listing

- a. specific antibiotic
b. multiple antibiotic use on
same admission

by: Service/Department
Physician
Diagnosis
Cultures obtained or not obtained
Operative procedure

1. C, CS 2. Chiefs,
involved Svc/Dept
3. C, Pharmacy
4. Requester 5. PAD

22. Review of utilization of specific medications/
laboratory procedure/radiology/nuclear medicine
procedure

1. C, CS 2. Requester
3. PAD

23. Comparison of length of stay (LOS) by diagnosis/
procedure Svc/Dept/Md by diagnosis

AVAILABLE REPORTS

SPECIAL - UPON REQUEST REPORTS

REPORTS

DISTRIBUTION

- | | |
|---|--|
| 24. Comparison of consultations obtained to final diagnosis

final diagnosis to number of ancillary svc consultations | 1. C, CS 2. Requester
3. PAD |
| 25. Comparison of pre-operative days by:
Service
Diagnosis/operative procedure
Physician | 1. C, CS 2. Requester
3. PAD |
| 26. Review of medications that require laboratory follow up | 1. C, CS 2. Requester
3. PAD 4. C, Pharmacy |
| 27. Review of medications which require dosage based on age/weight | 1. C, CS 2. Requester
3. PAD 4. C, Pharmacy |
| 28. Anesthesia Review
by type of anesthesia
operative procedure
complication | 1. C, CS 2. Chiefs,
involved Svc/Dept 3.
PAD |

NOTE: Any item of interest captured by Quality Assurance Abstract may be compared and displayed

Any Svc/Dept may review and evaluate laboratory/radiology studies performed by diagnosis

Example: A specific diagnosis is selected and a profile is displayed showing specific studies obtained

A review of admitting blood pressure; highest blood pressure reading; compare if medication given; what is diagnosis?

QUALITY ASSURANCE ABSTRACT

1. PATIENT NUMBER	2. SEX	3. AGE	4. RACE	5. SOCIAL SECURITY NUMBER	6. DATE OF DISPOSITION (DD MM YY)	7. DATE ADMITTED (DD MM YY)	8. TOTAL DAYS THIS FACILITY	9. TOTAL BY DAYS THIS FACILITY
-----	---	---	---	-----	-----	-----	-----	-----
10. CLINICAL SERVICE	11. ICD CODE	12. RESIDENT CODE	13. MEDICAL RECORD ANALYST	14. DIAGNOSIS CODES	15. INJURY CODE	16. OPERATION CODES		
---	-----	-----	---	-----	---	-----		
17. PEAR DAYS	18. ANESTHESIA IN	19. ADMISSION VIA	20. HEMATOLOGY FOR SAME/RELATED DIAGNOSIS	21. SPECIAL CARE UNITS	22. DAYS IN SPECIAL CARE UNIT	23. UNEXPECTED TRANSFER FROM USR CARE AND	24. HEMODIALYSIS	
---	---	---	---	---	---	---	-----	
25. ANCILLARY SERVICE CONSULTATIONS			26. EVIDENCE OF ON ADMISSION	27. DOCUMENTED EVIDENCE OF PATIENT DISEASE	28. ADH/PRIN DISC	29. EN DIAC/ DISC DIAC AGREE	30. CDDP NOTES DOCT BY NO	31. EVAL & APPEAL BY NO
-----			---	---	---	---	---	---
32. HOSPITAL ACQUIRED INFECTION	33. HOSPITAL INCURRED INFECTION	34. BLOOD TRANSFUSIONS						
---	---	---						
35. AMT GIVEN	36. PRE-TRANS HEMO-CLOBIN	37. POST-TRANS HEMO-CLOBIN	38. PRE-TRANS HEMA-TOCIT	39. POST-TRANS HEMA-TOCIT	40. EST BLOOD LOSS DURING SURGERY/ EPISODE OF ACTIVE BLEEDING	41. HOSPITAL RELATED UTMPLICATION	42. PRE AND POST OP DIAC AGREE	43. FINAL & PATI DIAC AGREE
---	---	---	---	---	---	---	---	---
44. DISCHARGE STATUS			45. ADMISSION BLOOD PRESSURE	46. HIGHEST BLOOD PRESSURE	47. ADMISSION TEMP	48. PEAK TEMP	49. WEIGHT RECORDED	50. APCAR
-----			---	---	---	---	---	---
51. EXAMINATIONS			52. RADIOLOGY			53. LABORATORY-CHEMISTRY STUDIES		
-----			-----			-----		
54. ADMISSION HEMO-CLOBIN	55. ADMISSION HEMA-TOCIT	56. WHITE BLOOD CELL COUNT ON ADMISSION	57. HEMATOLOGY STUDIES			58. URINE STUDIES		
---	---	---	-----			-----		
59. OTHER LABORATORY STUDIES						60. OTHER MANAGEMENT		
-----						-----		
61. MODIFICATIONS						62. INPUT CHIEFS INITIALS		
-----						---		

INPATIENT TREATMENT RECORD CHECKLIST

REGISTER NUMBER: _____

PATIENT'S NAME: _____ SSAN: _____ DISCHARGED: _____

TO DR. _____ DATE: _____

_____ NARRATIVE SUMMARY REQUIRES DICTATION. DATE DICTATED: _____

_____ INPATIENT TREATMENT RECORD COVER SHEET REQUIRES SIGNATURE.

_____ NARRATIVE SUMMARY (SF 502) REQUIRES SIGNATURE ON EACH PAGE.

_____ ABBREVIATED MEDICAL RECORD (SF 539) REQUIRES _____ SIGNATURE _____ COMPLETION

_____ HISTORY & PHYSICAL (SF 505, 506) REQUIRES _____ SIGNATURE _____ COMPLETION

_____ DOCTOR'S PROGRESS NOTES (SF 509) REQUIRES 1. _____ SIGNATURE

2. _____ DOCUMENTATION OF REASON SHORT STAY BECAME LONG STAY (4 DAYS OR MORE)

_____ NURSING ADMISSION NOTE (SF 510) _____ INCOMPLETE _____ MISSING

_____ DISCHARGE NURSING NOTE (SF 510) _____ INCOMPLETE _____ MISSING

_____ PATIENT DISCHARGE PLAN (DA 4700) _____ INCOMPLETE _____ MISSING

_____ CONSULTATION SHEET (SF 513) REQUIRES _____ SIGNATURE _____ COMPLETION

_____ RESPIRATORY THERAPY EVALUATION REQUIRES _____ SIGNATURE _____ COMPLETION

_____ REPORT OF OPERATION (SF 516) REQUIRES SIGNATURE

_____ ELECTROCARDIOGRAM (SF 520) REQUIRES _____ INTERPRETATION _____ SIGNATURE

_____ PRENATAL & PREGNANCY (SF 533), _____ LABOR (SF 534) _____ NEWBORN (SF 535)

REQUIRES _____ SIGNATURE _____ COMPLETION

_____ DOCTOR'S ORDER (DA 4256) REQUIRES _____ SIGNATURE _____ COUNTERSIGNATURE

_____ NURSING ASSESSMENT AND CARE PLAN (DA 3888 & 3888-1) _____ INCOMPLETE _____ MISSING

_____ OTHER (specify) _____

ATTENTION: MEDICAL RECORD TECHNICIAN - SEE REVERSE SIDE FOR
ANCILLARY DATA LISTING

MEDICAL RECORD DOCUMENTS - THIS ADMISSION

[illegible]

COMMENTS: _____

CLINICAL RECORD QUALITY ASSURANCE PROGRAM

TABLE OF CONTENTS

<u>ITEM</u>	<u>ITEM NUMBER</u>
REGISTER NUMBER	1
SEX	2
AGE	3
RACE	4
FAMILY MEMBER PREFIX AND SOCIAL SECURITY ACCOUNT NUMBER	5
DATE OF DISPOSITION	6
DATE ADMITTED	7
TOTAL DAYS THIS FACILITY	8
TOTAL BED DAYS THIS FACILITY	9
CLINICAL SERVICE	10
PHYSICIAN CODE	11
RESIDENT CODE	12
MEDICAL RECORD ANALYST	13
DIAGNOSIS CODES	14
CAUSE OF INJURY CODE	15
OPERATION CODE	16
PREOPERATIVE DAYS	17
ANESTHESIA	18
ADMISSION VIA	19
READMISSION FOR SAME/RELATED DIAGNOSIS WITH ___ MONTHS	20
SPECIAL CARE UNIT	21
DAYS IN SPECIAL CARE UNIT	22

CLINICAL RECORD QUALITY ASSURANCE PROGRAM

TABLE OF CONTENTS

<u>ITEM</u>	<u>ITEM NUMBER</u>
UNEXPECTED TRANSFER FROM GENERAL CARE BED TO	23
CONSULTATIONS	24
ANCILLARY SERVICE CONSULTATIONS	25
EVIDENCE OF ALCOHOL/DRUG USE OR PSYCHOSIS ON ADMISSION	26
DOCUMENTED EVIDENCE OF PATIENT DISSATISFACTION	27
ADMISSION AND PRINCIPAL DISCHARGE DIAGNOSIS AGREE	28
EMERGENCY ROOM DIAGNOSIS AND DISCHARGE DIAGNOSIS AGREE	29
COMPREHENSIVE PROGRESS NOTE(S) DOCUMENTED BY ATTENDING MD	30
EVALUATION AND APPROVAL BY ATTENDING PHYSICIAN	31
HOSPITAL ACQUIRED INFECTION	32
HOSPITAL INCURRED INCIDENT	33
BLOOD TRANSFUSIONS	34
AMOUNT OF BLOOD TRANSFUSED	35
PRE-TRANSFUSION HEMOGLOBIN	36
POST TRANSFUSION HEMOGLOBIN	37
PRE-TRANSFUSION HEMATOCRIT	38
POST TRANSFUSION HEMATOCRIT	39
ESTIMATED BLOOD LOSS DURING SURGERY/EPISODE OF BLEEDING	40
HOSPITAL RELATED COMPLICATION	41
PRE AND POSTOPERATIVE DIAGNOSES AGREE	42
FINAL AND PATHOLOGIC DIAGNOSES AGREE	43
DOCUMENTED INDICATIONS FOR SURGERY AGREE WITH ESTABLISHED CRITERIA	44
CONSENT IS INFORMED, PROPERLY SIGNED AND APPROPRIATE TERMS ARE USED	45

CLINICAL RECORD QUALITY ASSURANCE PROGRAM

TABLE OF CONTENTS

<u>ITEM</u>	<u>ITEM NUMBER</u>
DISCHARGE STATUS	46
ADMISSION BLOOD PRESSURE	47
HIGHEST BLOOD PRESSURE	48
ADMISSION TEMPERATURE	49
PEAK TEMPERATURE	50
WEIGHT RECORDED	51
APGAR	52
DISPOSITION	53
EXAMINATIONS/FUNCTIONS	54
RADIOLOGY	55
LABORATORY - CHEMISTRY STUDIES	56
ADMISSION HEMOGLOBIN	57
ADMISSION HEMATOCRIT	58
WHITE BLOOD CELL COUNT ON ADMISSION	59
OTHER HEMATOLOGY STUDIES	60
URINE STUDIES	61
NUCLEAR MEDICINE STUDIES	62
OTHER LABORATORY STUDIES	63
OTHER MANAGEMENT	64
MEDICATIONS	65
INPUT CLERK	66

WOMACK ARMY COMMUNITY HOSPITAL
FORT BRAGG, NORTH CAROLINA

CUSTOMER AUTHENTICATION SCREEN

Please Enter Your:

Personal Identifier-----[]

Individual Password-----[]

QUALITY ASSURANCE ABSTRACT UPDATE
DATA ENTRY COMMAND SCREEN

The following commands are available:

- (A)DD - Add new record to file
- (D)ELETE - Delete record from file
- (C)HANGE - Change an existing record
- (L)IST - List an existing record
- (H)ELP - List available commands
- (B)YE - Stop processing file

Register Number is required for all commands except Help and Bye.

Enter command and Register Number:

Command [] Register Number []

QUALITY ASSURANCE ABSTRACT UPDATE SCRREN

1[] 2[] 3[] 4[] 5[] 6[] 7[] 8[] 9[]
10[] 11[] 12[] 13[] 14[] [] [] 15[] 16[] []
17[] 18[] 19[] 21[] 22[] 23[] 24[] [] []
25[] [] [] 26[] 27[] 28[] 29[] 30[] 31[] 32[] 33[] 34[]
35[] 36[] 37[] 38[] 39[] 40[] 41[] 42[] 43[] 44[] 45[]
46[] [] [] [] [] 47[] 48[] 49[] 50[] 51[] 52[] 53[]
54[] [] [] [] 55[] [] [] [] [] 56[] [] [] [] []
57[] 58[] 59[] 60[] [] [] [] 61[] [] [] 62[] [] []
63[] [] [] [] [] 64[] [] [] [] [] [] []
65[] [] [] [] [] [] [] [] [] [] [] 66[]

PHYSICIAN ACTIVITY PROFILE

Information furnished by Clinical Record Quality Assurance Program
in support of credentialling.

1. Total admissions/dispositions
2. Total operative procedures performed
3. Total consultations answered
4. Total consultations requested
5. Total complications
6. Total nosocomial infections
7. Total cases treated with transfusion
Number of units transfused/type of transfusion
8. Total death cases
9. Total patient days
10. Average length of stay

Items are available in register number listing.

NOTE: A separate computer program has been recommended to capture number and type of continuing medical education hours approved and obtained by C, CS. This separate program may also capture required meeting attendance and number of delinquent medical records.

PHYSICIAN ACTIVITY PROFILE

PHYSICIAN: _____ SSAN: _____

	1982	1983	1984		
CLINICAL					
TOTAL PROCEDURES PERFORMED					
TOTAL CONSULTATIONS ANSWERED					
TOTAL PATIENTS WITH COMPLICATIONS					
TOTAL PATIENTS WITH HOSP INCURRED INFECTIONS					
TOTAL PATIENTS TRANSFUSED					
TOTAL DEATHS					

TOTAL ADMISSIONS					
TOTAL PATIENT DAYS					
AVERAGE LENGTH OF STAY					
SPECIAL: TOTAL/MONTHLY AVERAGE DELINQUENT M.RECORDS					
CATEGORY 1 CME HOURS					
REQUIRED MEETING ATTENDANCE RECORD					

ANNEX D

Extract of Quality Assurance Monitor, The
Professional Activity Study

CRITERIA

Column 1

Patient Groups and Monitor Parameters
Names and numbers of groups and parameters. Also appearing in column 1 are certain basic descriptive statistics described below.

In calculating the percentages in columns 4-6 total patients in the groups are used as the denominator in most cases. When a subset of total patients is used, the actual numerator and denominator follow the parameter name in parentheses.

- * data used to calculate median and threshold values were derived from all U.S. PAS hospitals rather than the control group displayed on the report
- ω insufficient data available to calculate valid comparisons

Criteria relating to discharge status, schedule, etc., do not apply to patients who left against medical advice or who were transferred to another hospital or to a skilled nursing facility or who died.

Other criteria that are not self-explanatory are defined on the QAM Monitor Profile. See Medical Unit Department.

STANDARDS

The standard is a percentage or percentage range indicating how often a given parameter should occur per 100 patients if the care is optimal.

Column 2

Suggested
At CPHA's request, committees advisory to us on the Quality Assurance Monitor were appointed by the American Academy of Family Physicians, the American Academy of Pediatrics, the American College of Obstetrics and Gynecologists, the American College of Physicians, the American College of Surgeons, and the American Psychiatric Association. These committees reviewed the patient groups and monitor parameters that appear in QAM and set the suggested standards. Valuable input was also provided by the National League for Nursing. CPHA is grateful to the members of each committee for the contribution of their clinical expertise and to the parent organization's for their support of QAM.

Column 3

Hospital's
This space is provided for the voluntary set by the hospital's medical staff. Even here, any standards that differ from the suggested.

HOSPITAL PERFORMANCE, % BY TIME PERIOD

Columns 4-6 This Time, Last Time, Year Ago
Data for the current time period are specified at the bottom of the report; appear in column 4. The previous, corresponding time period's data are shown in column 5, and those from one year ago appear in column 6. * indicates a value between 0.0 and 0.5 percent.

PROFILE

For each parameter, a graphic display of the following:
O-100% values
X Hospital performance as it varies from the suggested standard and the final value is shown in column 4.
H Hospital performance as it varies from other cases.

Grouped by patient group and parameter. The data are presented in a graphic display of the following: O-100% values, X Hospital performance as it varies from the suggested standard and the final value is shown in column 4, H Hospital performance as it varies from other cases.

A Most inpatient deaths occur during the first 50th percentile performance and are usually of a low acuity.

M The median for this group is 2.5% to indicate the median performance and to indicate the final value. The final value is shown in column 4. The final value is shown in column 4. The final value is shown in column 4.

BASIC STATISTICS

Fatality Index
The fatality index is calculated by multiplying the number of deaths by the number of patients in the group. The fatality index is calculated by multiplying the number of deaths by the number of patients in the group.

Perinatal Fatality Index, Neonatal Fatality Index
Similar to the fatality index, but only of those deaths which occur in the perinatal and neonatal periods. The perinatal fatality index is calculated by multiplying the number of perinatal deaths by the number of patients in the group. The neonatal fatality index is calculated by multiplying the number of neonatal deaths by the number of patients in the group.

Mortality Rate, Autopsy Rate, Average Stay, Median Stay
The mortality rate is calculated by multiplying the number of deaths by the number of patients in the group. The autopsy rate is calculated by multiplying the number of autopsies by the number of patients in the group. The average stay is calculated by dividing the total number of patient days by the number of patients in the group. The median stay is calculated by dividing the total number of patient days by the number of patients in the group.

% Male, Average Charge
The percentage of male patients is calculated by dividing the number of male patients by the number of patients in the group. The average charge is calculated by multiplying the number of charges by the number of patients in the group.

Average Charge per resource need unit
The average charge per resource need unit is calculated by multiplying the number of charges by the number of resource need units in the group.

Ratio of the average charge per RNU of this group to the overall average charge per RNU of all patients except newborn (See Group 001)
The ratio of the average charge per RNU of this group to the overall average charge per RNU of all patients except newborn is calculated by dividing the average charge per RNU of this group by the average charge per RNU of all patients except newborn.

% who left against medical advice
The percentage of patients who left against medical advice is calculated by dividing the number of patients who left against medical advice by the number of patients in the group.

% of all patients for this report
The percentage of all patients for this report is calculated by dividing the number of patients for this report by the number of patients in the group.

% over age 1 given 1 unit of blood
The percentage of patients over age 1 given 1 unit of blood is calculated by dividing the number of patients over age 1 given 1 unit of blood by the number of patients in the group.

% transfused (excluding acute blood loss, 285 1)
The percentage of patients transfused (excluding acute blood loss, 285 1) is calculated by dividing the number of patients transfused (excluding acute blood loss, 285 1) by the number of patients in the group.

% delivered by Cesarean Section
The percentage of patients delivered by Cesarean Section is calculated by dividing the number of patients delivered by Cesarean Section by the number of patients in the group.

% with peritonitis
The percentage of patients with peritonitis is calculated by dividing the number of patients with peritonitis by the number of patients in the group.

% with congenital anomaly
The percentage of patients with congenital anomaly is calculated by dividing the number of patients with congenital anomaly by the number of patients in the group.

% with consultation
The percentage of patients with consultation is calculated by dividing the number of patients with consultation by the number of patients in the group.

% given antileptics
The percentage of patients given antileptics is calculated by dividing the number of patients given antileptics by the number of patients in the group.

% given neuroleptics
The percentage of patients given neuroleptics is calculated by dividing the number of patients given neuroleptics by the number of patients in the group.

QAM Quality Assurance Monitor Monitor Profile

CPHA Best Available Copy^{PAS}

870A-12-81

Commission on Professional and Hospital Activities Study

Copy available to DTIC does not permit full, reliable reproduction

Background Comments on Monitoring

1. Whatever the motivations for implementing quality assurance techniques for improved patient care, these motivations apply to all of the patients on a continuing basis; i.e., "all of the time"...exception: if meeting Medicare-Medicaid UR or PSRO regulations is only motivation.
2. Only a small fraction of the patients can be evaluated by MCE studies if the traditional diagnosis and operation grouping is employed.
3. Monitoring (screening) techniques provide the only currently available approach to review of all patients.
4. Definition of a monitor: A monitor is a tool for assessing the quality of care of all patients on a continuing, repetitive basis.
5. Purpose of a monitor:
 - a. Review of care of all patients
 - b. Rational approach to selection of topics for in-depth studies
 - c. Automatic follow-up on quarterly or semiannual basis
6. The specifications for a monitor:
 - a. Groupings which cover all patients
 - b. Appropriate criteria (monitor parameters) for each group
 - c. Hospital's own performance for each parameter
 - d. Basis for comparison
 - 1) To standards
 - a) suggested by specialty societies
 - b) established by the individual hospital
 - 2) To performance of other hospitals
 - a) norms (median performance)
 - b) "Thresholds for investigation" --top 10% of hospitals
 - 3) To a hospital's own past performance
7. QAM has the following levels of grouping
 - Primary
 - Hospital-wide
 - Clinical Service
 - Operated Patient
 - Secondary
 - All patients
 - Patients with abnormal findings (five)
 - Patients with selected therapies (five)
 - Frequent diagnoses and operations (96)
8. Criteria for diagnosis and operation specific groups are selected from the following areas, which comprise the seven major types of criteria for balanced monitoring or a balanced medical audit study:
 - a. Validation of diagnosis
 - b. Justification for admission
 - c. Justification for special procedures (surgery or special investigation)
 - d. Outcomes
 - e. Critical investigations
 - f. Critical management
 - g. Other indicators

ED-D1360

Revised Mar 79

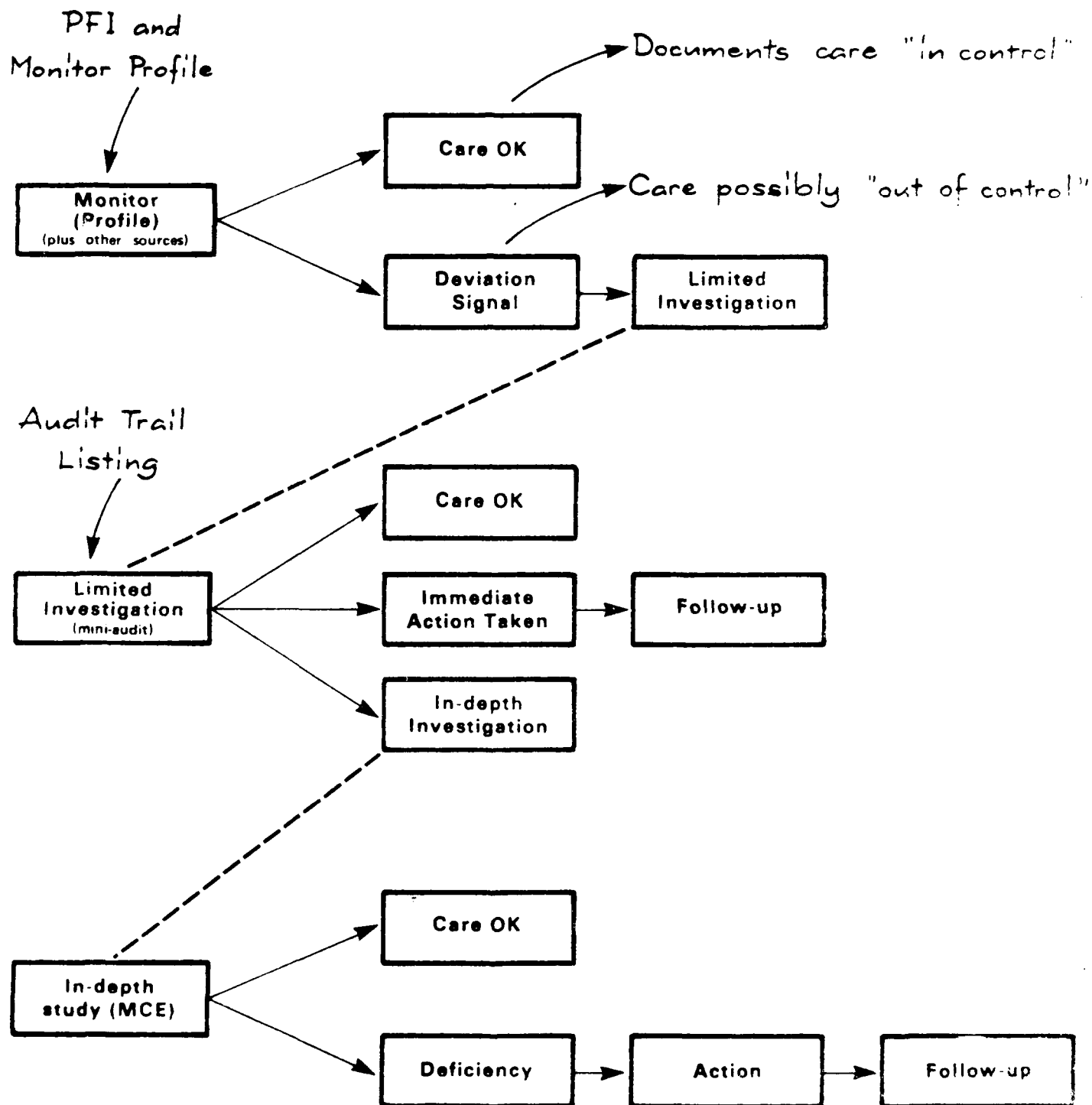
JAL-66

PHA

Commission on Professional and Hospital Activities 1968 Green Road Ann Arbor, Michigan 48103

affiliated organization sponsored by the American College of Physicians, American College of Surgeons, American Hospital Association, Southwestern Michigan Hospital Co.

FLOW of QUALITY IMPROVEMENT ACTIVITIES



CPHA

Commission on Professional and Hospital Activities

1965 Green Road Ann Arbor, Michigan 48105

January 1, 1981
12/1/1980

Special QAM Features
(using matching data bases)

FATALITY INDEX

$$\text{Fatality Index} = \frac{\text{Actual Deaths}}{\text{Expected deaths}} *$$

Expected deaths are calculated by matching each case in your patient group against a data base of 12,000,000 cases (about 300,000 deaths) to determine likelihood of death of each patient. Sum of all "likelihoods" equals "Expected deaths."

Values above 1.00 indicate that there were more deaths in your patient group than would have been expected based on your particular case mix. Conversely, values below 1.00 indicate that there were fewer deaths than might have been expected from the case mix in your group.

It is unlikely that the test is sensitive to the degree that small variations merit further investigation. We would urge investigation of indexes above 1.25 or below .75 (25% more or fewer deaths than expected). Disregard indexes of 0.00 except in the rare group where deaths would almost invariably be expected, e.g., acute myocardial infarction.

B. LENGTH OF STAY SIGNIFICANCE TESTS

"High" or "Low" for length of stay is printed after the median stay figure for a group if applicable. Each patient is matched against the appropriate median stay in the appropriate regional data base. If a statistically significant number of cases are above or below their respective medians, a "high" or "low" prints.

No "high" or "low" means that differences are not statistically significant or fewer than six matchable patients are in the group. Deaths, transfers to another hospital, and patients leaving against medical advice are not matched.

C. CHARGE INDEX

$$\text{Charge Index} = \frac{\text{Actual charges}}{\text{Expected charges}}$$

The above ratio is a simplification of the explanation found on the back of the Monitor Profile forms in the last column.

Indexes above 1.00 indicate that your hospital is charging more than would be expected based on relative charges of other hospitals in the data base (this group is subsidizing other patients in your hospital), or your hospital is providing more care (consuming more resources) than is being provided for matching patients in the data base. Values above 1.20 or below .80 probably merit further investigation.

LA

jk1
Revised July 81

Commission on Professional and Hospital Activities 1968 Green Road Ann Arbor, Michigan 48103

It is organized and sponsored by the American College of Physicians, American College of Surgeons, American Hospital Association, Southwestern Medical Center, etc.

QAM

Quality Assurance Monitor

PATIENT GROUPS, BASIC STATISTICS, AND CRITERIA

The Quality Assurance Monitor displays hospital performance in 167 patient groups. Included are 800 items of basic, descriptive information and 789 criteria including suggested standards. These groups, basic statistics, and criteria are distributed as follows:

QAM Report (1)	Number of Groups (2)	Total Statistics (3)	Total Criteria (4)
Hospitalwide	11	31	30
Pediatric Medicine	11	29	31
Adult Medicine	11	29	34
Surgery	11	29	31
OB-Gyn	12	34	39
Newborn	2	13	11
Psychiatry	11	30	33
Diagnosis Groups (any department)	73	513	446
Operated Patients	6	30	30
Procedure Groups (any department)	19	62	104
Totals	167	800	789

At the head of each QAM group on the Monitor Profile are displayed certain basic, descriptive statistics for which no standards are suggested. The following 22 items of information when applicable and appropriate are displayed for each of the 167 patient groups:

1. Total patients
2. Fatality index
3. Mortality rate
4. Autopsy rate
5. Average stay
6. Median stay
7. Percent male
8. Average charge
9. Charge index
10. Average charge per resource need unit
11. Percent who left against medical advice
12. Percent of all patients for this report
13. Percent over age one given only one unit of blood
14. Percent transfused (excluding acute blood loss)
15. Percent delivered by cesarean section
16. Percent with peritonitis
17. Percent with congenital anomaly
18. Percent with consultation
19. Percent given anxiolytics
20. Percent given neuroleptics
21. Perinatal fatality index
22. Neonatal fatality index

CRITERIA LIST

All criteria are available from PAS
Data for shaded criteria are drawn from the Quality
Control Data Set, and are therefore **not** available to hospitals
submitting only the Basic Data Set

PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS
HOSPITALWIDE (EXCEPT NEWBORN)	
001 ALL PATIENTS, BASIC WORKUP	
1. % WITH URINALYSIS	100
2. % WITH HEMOGLOBIN OR HEMATOCRIT	100
3. % 1 YEAR AND OVER WITH ADM BP RECORDED	100
4. % WITH WEIGHT RECORDED	100
5. % MEETING MINIMUM LABORATORY REQUIREMENTS	100
6. % WITH SYMPTOM AS PRINCIPAL DIAGNOSIS	0-5
002 PATIENTS WITH ELEVATED ADM DIAS BP (EXC PREG)	
1. % WITH HYPERT DX OR WITH DISCH VITAL SIGNS STABLE	100
2. % WITH URINALYSIS	100
3. % AGE 19+ GIVEN DIURETIC OR HYPOTENSIVE	100
003 PATIENTS WITH ADMISSION HGB<10 GM% (HCT<30%)	
1. % WITH BLEEDING, HEMOLYSIS, ANEMIA, OR MALIGNANCY	100
2. % GIVEN GEN ANESTH WITHOUT TRANSFUSION	0
004 PATIENTS WITH ABNORMAL BLOOD SUGAR	
1. % OF THOSE NOT DIAGNOSED AS DIABETIC OR HYPOGLYC WHO HAD A GTT OR REPEAT BLOOD GLUCOSE	100
005 PATIENTS WITH URINE POSITIVE FOR PROTEIN	
1. % WITH DX OF KIDNEY DISEASE, REPEAT UA, OR OTHER URINARY SYSTEM EVALUATION	100
006 PATIENTS WITH URINE POSITIVE FOR SUGAR	
1. % WITH REPEAT URINE SUGAR TEST	100
2. % WITH BLOOD SUGAR TEST	100
007 PATIENTS GIVEN ANTICOAGULANTS	
1. % WITH INDICATION	100
2. % WITH COAGULATION TEST	100
3. % WITH STOOL FOR BLOOD	100
008 PATIENTS GIVEN ANTIBIOTICS	
1. % WITH INDICATION	100
2. % WITH SELECTED INFECTIONS WITH C & S	100
009 PATIENTS GIVEN DIURETICS	
1. % WITH INDICATION	100
2. % WITH WEIGHT RECORDED	100
3. % WITH ELECTROLYTE DETERMINATION	100

PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS
010. PATIENTS WITH OTHER DRUG THERAPY	
1. % GIVEN HYPOTENSIVES WITHOUT HYPERT DX	0
2. % GIVEN CARDIOREGULATORS W/O CARDIAC DX	0
3. % GIVEN ANTIDIABETICS W/O DIABETIC DX	0
4. % GIVEN NEUROLEPTICS W/O MAJ PSYCH DX	0
011 PATIENTS TRANSFUSED	
1. % WITH INDICATION FOR TRANSFUSION	100
2. % WITH ANEMIA (EX 285) GIVEN PACKED RBC	100
3. % WITH TRANSFUSION REACTION, 999 6-999 8	0
DEPT OF PEDIATRIC MEDICINE	
101 ALL PATIENTS, BASIC WORKUP	
1. % WITH URINALYSIS	100
2. % WITH HEMOGLOBIN OR HEMATOCRIT	100
3. % 1 YEAR AND OVER WITH ADM BP RECORDED	100
4. % WITH WEIGHT RECORDED	100
5. % MEETING MINIMUM LABORATORY REQUIREMENTS	100
6. % WITH SYMPTOM AS PRINCIPAL DIAGNOSIS	0-5
7. % WITH CBC, HGB/HCT, WBC, DIFFERENTIAL	100
102 PATIENTS WITH ELEVATED ADM DIAS BP (EXC PREG)	
1. % WITH HYPERT DX OR WITH DISCH VITAL SIGNS STABLE	100
2. % WITH URINALYSIS	100
3. % AGE 19+ GIVEN DIURETIC OR HYPOTENSIVE	100
4. % UNDER 10 YEARS WITH CVP, B7 73	100
103 PATIENTS WITH ADMISSION HGB<10GM% (HCT<30%)	
1. % WITH BLEEDING, HEMOLYSIS, ANEMIA, OR MALIGNANCY	100
2. % GIVEN GEN ANESTH WITHOUT TRANSFUSION	0
104 PATIENTS WITH ABNORMAL BLOOD SUGAR	
% OF THOSE NOT DIAGNOSED AS DIABETIC OR HYPOGLYC WHO HAD A GTT OR REPEAT BLOOD GLUCOSE	100
105 PATIENTS WITH URINE POSITIVE FOR PROTEIN	
1. % WITH DX OF KIDNEY DISEASE, REPEAT UA OR OTHER URINARY SYSTEM EVALUATION	100
106 PATIENTS WITH URINE POSITIVE FOR SUGAR	
1. % WITH REPEAT URINE SUGAR TEST	100
2. % WITH BLOOD SUGAR TEST	100

PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS
107 PATIENTS GIVEN ANTICOAGULANTS	
1 % WITH INDICATION	100
2 % WITH COAGULATION TEST	100
3 % WITH STOOL FOR BLOOD	100
108 PATIENTS GIVEN ANTIBIOTICS	
1 % WITH INDICATION	100
2 % WITH SELECTED INFECTIONS WITH C & S	100
109 PATIENTS GIVEN DIURETICS	
1 % WITH INDICATION	100
2 % WITH WEIGHT RECORDED	100
3 % WITH ELECTROLYTE DETERMINATION	100
110 PATIENTS WITH OTHER DRUG THERAPY	
1 % GIVEN HYPOTENSIVES WITHOUT HYPERT DX	0
2 % GIVEN CARDIOREGULATORS W/O CARDIAC DX	0
3 % GIVEN ANTIDIABETICS W/O DIABETIC DX	0
4 % GIVEN NEUROLEPTICS W/O MAJ PSYCH DX	0
111 PATIENTS TRANSFUSED	
1 % WITH INDICATION FOR TRANSFUSION	100
2 % WITH ANEMIA (EX 285.1) GIVEN PACKED RBC	100
3 % WITH TRANSFUSION REACTION, 999.6-999.8	0
DEPT OF MEDICINE	
201 ALL PATIENTS, BASIC WORKUP	
1 % WITH URINALYSIS	100
2 % WITH HEMOGLOBIN OR HEMATOCRIT	100
3 % 1 YEAR AND OVER WITH ADMISSION BP RECORDED	100
4 % WITH WEIGHT RECORDED	100
5 % MEETING MINIMUM LABORATORY REQUIREMENTS	100
6 % WITH SYMPTOM AS PRINCIPAL DIAGNOSIS	0-5
7 % AGE 40+ WITH RECTAL EXAM	100
8 % WITH FUNDUSCOPIC EXAM	100
9 % WITH BLOOD SUGAR TEST	100
10 % WITH NITROGEN DERIVATIVE TEST	100
202 PATIENTS WITH ELEVATED ADM DIAS BP (EXC PREG)	
1 % WITH HYPERT DX OR WITH DISCH VITAL SIGNS STABLE	100
2 % WITH URINALYSIS	100
3 % AGE 19+ GIVEN DIURETIC OR HYPOTENSIVE	100
4 % WITH ECG	100
203 PATIENTS WITH ADMISSION HGB < 10 GM% (HCT < 30%)	
1 % WITH BLEEDING, HEMOLYSIS, ANEMIA, OR MALIGNANCY	100
2 % GIVEN GEN ANESTH WITHOUT TRANSFUSION	0
204 PATIENTS WITH ABNORMAL BLOOD SUGAR	
1 % OF THOSE NOT DIAGNOSED AS DIABETIC OR HYPOGLYC WHO HAD A GTT OR REPEAT BLOOD GLUCOSE	100

PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS
205 PATIENTS WITH URINE POSITIVE FOR PROTEIN	
1 % WITH DX OF KIDNEY DISEASE, REPEAT UA, OR OTHER URINARY SYSTEM EVALUATION	100
206 PATIENTS WITH URINE POSITIVE FOR SUGAR	
1 % WITH REPEAT URINE SUGAR TEST	100
2 % WITH BLOOD SUGAR TEST	100
207 PATIENTS GIVEN ANTICOAGULANTS	
1 % WITH INDICATION	100
2 % WITH COAGULATION TEST	100
3 % WITH STOOL FOR BLOOD	100
208 PATIENTS GIVEN ANTIBIOTICS	
1 % WITH INDICATION	100
2 % WITH SELECTED INFECTIONS WITH C & S	100
209 PATIENTS GIVEN DIURETICS	
1 % WITH INDICATION	100
2 % WITH WEIGHT RECORDED	100
3 % WITH ELECTROLYTE DETERMINATION	100
210 PATIENTS WITH OTHER DRUG THERAPY	
1 % GIVEN HYPOTENSIVES WITHOUT HYPERT DX	0
2 % GIVEN CARDIOREGULATORS W/O CARDIAC DX	0
3 % GIVEN ANTIDIABETICS W/O DIABETIC DX	0
4 % GIVEN NEUROLEPTICS W/O MAJ PSYCH DX	0
211 PATIENTS TRANSFUSED	
1 % WITH INDICATION FOR TRANSFUSION	100
2 % WITH ANEMIA (EX 285.1) GIVEN PACKED RBC	100
3 % WITH TRANSFUSION REACTION, 999.6-999.8	0
DEPT OF SURGERY	
301 ALL PATIENTS, BASIC WORKUP	
1 % WITH URINALYSIS	100
2 % WITH HEMOGLOBIN OR HEMATOCRIT	100
3 % 1 YEAR AND OVER WITH ADM BP RECORDED	100
4 % WITH WEIGHT RECORDED	100
5 % MEETING MINIMUM LABORATORY REQUIREMENTS	100
6 % WITH SYMPTOM AS PRINCIPAL DIAGNOSIS	0-5
7 % AGE 40+ WITH RECTAL EXAM	100
302 PATIENTS WITH ELEVATED ADM DIAS BP (EXC PREG)	
1 % WITH HYPERT DX OR WITH DISCH VITAL SIGNS STABLE	100
2 % WITH URINALYSIS	100
3 % AGE 19+ GIVEN DIURETICS OR HYPOTENSIVES	100
4 % WITH ECG	100
303 PATIENTS WITH ADMISSION HGB < 10 GM% (HCT < 30%)	
1 % WITH BLEEDING, HEMOLYSIS, ANEMIA, OR MALIGNANCY	100
2 % GIVEN GEN ANESTH WITHOUT TRANSFUSION	0

PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS
304. PATIENTS WITH ABNORMAL BLOOD SUGAR 1. % OF THOSE NOT DIAGNOSED AS DIABETIC OR HYPOGLYCEMIC WHO HAD A GTT OR REPEAT BLOOD GLUCOSE	100
305. PATIENTS WITH URINE POSITIVE FOR PROTEIN 1. % WITH DX OF KIDNEY DISEASE, REPEAT UA, OR OTHER URINARY SYSTEM EVALUATION	100
306. PATIENTS WITH URINE POSITIVE FOR SUGAR 1. % WITH REPEAT URINE SUGAR TEST 2. % WITH BLOOD SUGAR TEST	100 100
307. PATIENTS GIVEN ANTICOAGULANTS 1. % WITH INDICATION 2. % WITH COAGULATION TEST 3. % WITH STOOL FOR BLOOD	100 100 100
308. PATIENTS GIVEN ANTIBIOTICS 1. % WITH INDICATION 2. % WITH SELECTED INFECTIONS WITH C & S	100 100
309. PATIENTS GIVEN DIURETICS 1. % WITH INDICATION 2. % WITH WEIGHT RECORDED 3. % WITH ELECTROLYTE DETERMINATION	100 100 100
310. PATIENTS WITH OTHER DRUG THERAPY 1. % GIVEN HYPOTENSIVES WITHOUT HYPERT DX 2. % GIVEN CARDIOREGULATORS W/O CARDIAC DX 3. % GIVEN ANTIDIABETICS W/O DIABETIC DX 4. % GIVEN NEUROLEPTICS W/O MAJ PSYCH DX	0 0 0 0
311. PATIENTS TRANSFUSED 1. % WITH INDICATION FOR TRANSFUSION 2. % WITH ANEMIA (EX 285) GIVEN PACKED RBC 3. % WITH TRANSFUSION REACTION, 999.6-999.8	100 100 0
DEPT OF OB-GYN	
401. ALL PATIENTS, BASIC WORKUP 1. % WITH URINALYSIS 2. % WITH HEMOGLOBIN OR HEMATOCRIT 3. % 1 YEAR AND OVER WITH ADM BP RECORDED 4. % WITH WEIGHT RECORDED 5. % MEETING MINIMUM LABORATORY REQUIREMENTS 6. % WITH SYMPTOM AS PRINCIPAL DIAGNOSIS 7. % AFEBRILE WITH LATER FEVER	100 100 100 100 100 0.5 0
401. A ALL OBSTETRICS PATIENTS, BASIC WORKUP 1. % WITH URINALYSIS 2. % WITH HEMOGLOBIN OR HEMATOCRIT 3. % 1 YEAR AND OVER WITH ADM BP RECORDED 4. % WITH WEIGHT RECORDED 5. % MEETING MINIMUM LABORATORY REQUIREMENTS 6. % WITH SYMPTOM AS PRINCIPAL DIAGNOSIS 7. % AFEBRILE WITH LATER FEVER	100 100 100 100 100 0.5 0

PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS
401. B ALL GYNECOLOGY PATIENTS, BASIC WORKUP 1. % WITH URINALYSIS 2. % WITH HEMOGLOBIN OR HEMATOCRIT 3. % 1 YEAR AND OVER WITH ADM BP RECORDED 4. % WITH WEIGHT RECORDED 5. % MEETING MINIMUM LABORATORY REQUIREMENTS 6. % WITH SYMPTOM AS PRINCIPAL DIAGNOSIS 7. % WITH PELVIC EXAM 8. % AFEBRILE WITH LATER FEVER	100 100 100 100 100 0.5 100 0
402. PATIENTS WITH ELEVATED ADM DIAS BP (EXC PRES) 1. % WITH HYPERT DX OR WITH DISCH VITAL SIGNS STABLE 2. % WITH URINALYSIS 3. % AGE 19+ GIVEN DIURETIC OR HYPOTENSIVE 4. % WITH ECG	100 100 100 100
403. PATIENTS WITH ADMISSION HGB < 10 GM % (HCT < 30%) 1. % WITH BLEEDING, HEMOLYSIS, ANEMIA, OR MALIGNANCY 2. % GIVEN GEN ANESTH WITHOUT TRANSFUSION	100 0
404. PATIENTS WITH ABNORMAL BLOOD SUGAR 1. % OF THOSE NOT DIAGNOSED AS DIABETIC OR HYPOGLYCEMIC WHO HAD A GTT OR REPEAT BLOOD GLUCOSE	100
405. PATIENTS WITH URINE POSITIVE FOR PROTEIN 1. % WITH DX OF KIDNEY DISEASE, REPEAT UA, OR OTHER URINARY SYSTEM EVALUATION	100
406. PATIENTS WITH URINE POSITIVE FOR SUGAR 1. % WITH REPEAT URINE SUGAR TEST 2. % WITH BLOOD SUGAR TEST	100 100
407. PATIENTS GIVEN ANTICOAGULANTS 1. % WITH INDICATION 2. % WITH COAGULATION TEST 3. % WITH STOOL FOR BLOOD	100 100 100
408. PATIENTS GIVEN ANTIBIOTICS 1. % WITH INDICATION 2. % WITH SELECTED INFECTIONS WITH C & S	100 100
409. PATIENTS GIVEN DIURETICS 1. % WITH INDICATION 2. % WITH WEIGHT RECORDED 3. % WITH ELECTROLYTE DETERMINATION	100 100 100
410. PATIENTS WITH OTHER DRUG THERAPY 1. % GIVEN HYPOTENSIVES WITHOUT HYPERT DX 2. % GIVEN CARDIOREGULATORS W/O CARDIAC DX 3. % GIVEN ANTIDIABETICS W/O DIABETIC DX 4. % GIVEN NEUROLEPTICS W/O MAJ PSYCH DX	0 0 0 0

PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS
411 PATIENTS TRANSFUSED	
1. % WITH INDICATION FOR TRANSFUSION	100
2. % WITH ANEMIA (EX 285.1) GIVEN PACKED RBC	100
3. % WITH TRANSFUSION REACTION, 999.6-999.8	0-3
ALL NEWBORN	
501. ALL LIVEBORN AND STILLBORN	
1. % LIVEBORN	100
2. NEONATAL MORTALITY RATE (%)	C
3. % WITH BIRTHWEIGHT RECORDED	100
4. % WITH ADMISSION TEMPERATURE RECORDED	100
5. % WITH INFANT INFECTIONS	0.1
6. % W/O INFECTION OR RDS GIVEN ANTIBIOTICS	0
7. % NOT RH OR OTHER ISO-IMMUNE TRANSFUSED	0
502 NEONATES WITH BIRTHWEIGHT < 5 1/2 LBS (2500G)	
1. MORTALITY RATE (%)	0
2. % WITH LIVER FUNCTION TEST	100
3. % UNDER 1750G WITH CHEST X-RAY	100
4. % UNDER 1750G MONITORED	100
DEPT OF PSYCHIATRY	
601. ALL PATIENTS, BASIC WORKUP	
1. % WITH URINALYSIS	100
2. % WITH HEMOGLOBIN OR HEMATOCRIT	100
3. % 1 YEAR AND OVER WITH ADM BP RECORDED	100
4. % WITH WEIGHT RECORDED	100
5. % MEETING MINIMUM LABORATORY REQUIREMENTS	100
6. % WITH SYMPTOM AS PRINCIPAL DIAGNOSIS	0-5
7. MORTALITY RATE (%)	0
8. % OPERATED	0
9. % WITH ADVERSE REACT TO PSYCHOTROPIC AGENT, E939	0
602 PATIENTS WITH ELEVATED ADM DIAS BP (EXC PREG)	
1. % WITH HYPERT DX OR WITH DISCH VITAL SIGNS STABLE	100
2. % WITH URINALYSIS	100
3. % AGE 19+ GIVEN DIURETIC OR HYPOTENSIVE	100
4. % WITH ECG	100
603 PATIENTS WITH ADMISSION HGB < 10 GM% (HCT < 30%)	
1. % WITH BLEEDING, HEMOLYSIS, ANEMIA, OR MALIGNANCY	100
2. % GIVEN GEN ANESTH WITHOUT TRANSFUSION	0
604 PATIENTS WITH ABNORMAL BLOOD SUGAR	
1. % OF THOSE NOT DIAGNOSED AS DIABETIC OR HYPOGLYC WHO HAD A GTT OR REPEAT BLOOD GLUCOSE	100
605 PATIENTS WITH URINE POSITIVE FOR PROTEIN	
1. % WITH DX OF KIDNEY DISEASE, REPEAT URINALYSIS, OR OTHER URINARY SYSTEM EVALUATION	100
606 PATIENTS WITH URINE POSITIVE FOR SUGAR	
1. % WITH REPEAT URINE SUGAR TEST	100
2. % WITH BLOOD SUGAR TEST	100

PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS
607 PATIENTS GIVEN ANTICOAGULANTS	
1. % WITH INDICATION	100
2. % WITH COAGULATION TEST	100
3. % WITH STOOL FOR BLOOD	100
608 PATIENTS GIVEN ANTIBIOTICS	
1. % WITH INDICATION	100
2. % WITH SELECTED INFECTIONS WITH C & S	100
609. PATIENTS GIVEN DIURETICS	
1. % WITH INDICATION	100
2. % WITH WEIGHT RECORDED	100
3. % WITH ELECTROLYTE DETERMINATION	100
610. PATIENTS WITH OTHER DRUG THERAPY	
1. % GIVEN HYPOTENSIVES WITHOUT HYPERT DX	0
2. % GIVEN CARDIOREGULATORS W/O CARDIAC DX	0
3. % GIVEN ANTIDIABETICS W/O DIABETIC DX	0
4. % GIVEN NEUROLEPTICS W/O MAJ PSYCH DX	0
611 PATIENTS TRANSFUSED	
1. % WITH INDICATION FOR TRANSFUSION	100
2. % WITH ANEMIA (EX 285.1) GIVEN PACKED RBC	100
3. % WITH TRANSFUSION REACTION, 999.6-999.8	0
DIAGNOSIS GROUPS (ANY DEPARTMENT)	
701. INTESTINAL INFECTIOUS DISEASE, PEDIATRIC (PRINCIPAL DIAGNOSIS 001-009)	
1. MORTALITY RATE (%)	0
2. % WITH ELECTROLYTE DETERMINATION	100
3. % WITH STOOL CULTURE 90.92, 90.93	100
4. % WITH WEIGHT RECORDED	100
5. % GIVEN PARENTERAL FLUIDS	100
6. % GIVEN ANTIBIOTICS OR OTHER ANTI-INFECTIVES, EXCL 001, 002, 004, 006	0
7. % ISOLATED	100
8. % WITH PROGRESS SATISFACTORY AT DISCH	100
702 INTESTINAL INFECTIOUS DISEASE, ADULT (PRINCIPAL DIAGNOSIS 001-009)	
1. MORTALITY RATE (%)	0
2. % WITH ELECTROLYTE DETERMINATION	100
3. % WITH STOOL CULTURE 90.92, 90.93	100
4. % GIVEN PARENTERAL FLUIDS	100
5. % GIVEN ANTIBIOTICS OR OTHER ANTI-INFECTIVES, EXCL 001, 002, 004, 006	0
6. % ISOLATED	100
7. % WITH PROGRESS SATISFACTORY AT DISCHARGE	100
703 VIRAL HEPATITIS (PRINCIPAL DIAGNOSIS 070)	
1. MORTALITY RATE (%)	0
2. % WITH RECORDED JUSTIFICATION FOR ADMISSION	100
3. % WITH LIVER FUNCTION TEST	100
4. % WITH ENZYME STUDIES	100
5. % WITH COAGULATION STUDY	100
6. % WITH BACTERIAL OR VIRAL ANTIBODIES	100
7. % GIVEN ANXIOLYTICS OR NEUROLEPTICS	0
8. % WITH PROGRESS SATISFACTORY AT DISCHARGE	100

(DIA)

PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS
710 MALIGNANT NEOPLASM OF LARGE INTESTINE (PRINCIPAL DIAGNOSIS 153) 1 MORTALITY RATE (%) 2 % WITH INTESTINAL SURGERY 45 0-46 9 3 % WITH MALIGNANT TISSUE REPORTED 4 % WITH SIGMOIDOSCOPY OR COLONOSCOPY 5 % WITH LOWER GI X-RAY 87 64 6 % WITH POSTOPERATIVE COMPLICATION 7 % WITH NORMAL GI FUNCTION AT DISCHARGE	0-5 100 100 100 100 0 100
711 MALIGNANT NEOPLASM OF LUNG, BRONCHUS, TRACHEA (PRINCIPAL DIAGNOSIS 162) 1 MORTALITY RATE (%) 2 POSTOPERATIVE MORTALITY RATE (%) 3 % WITH MALIGNANT TISSUE REPORTED 4 % WITH POSTOPERATIVE COMPLICATION 5 % WITH PROGRESS SATISFACTORY AT DISCH	0-20 0-5 100 0 100
712 MALIGNANT NEOPLASM OF BREAST (PRINCIPAL DIAGNOSIS 174-175) 1 MORTALITY RATE (%) 2 % WITH MALIGNANT TISSUE REPORTED 3 % WITH CHEST X-RAY 4 % WITH EXTERPATIVE MASTECTOMY 85 41-85 48 5 % WITH POSTOPERATIVE COMPLICATION 6 % WITH PROGRESS SATISFACTORY AT DISCH	0 100 100 100 0 100
713 MALIGNANT NEOPLASM OF PROSTATE (PRINCIPAL DIAGNOSIS 185) 1 MORTALITY RATE (%) 2 % WITH MALIGNANT TISSUE REPORTED 3 % WITH SKELETAL X-RAY OR BONE SCAN 4 % WITH POSTOPERATIVE COMPLICATION 5 % WITH NORMAL URINARY FUNCTION AT DISCH	0 100 100 0 100
714 MALIGNANT NEOPLASM OF BLADDER (PRINCIPAL DIAGNOSIS 188) 1 MORTALITY RATE (%) 2 % WITH CYSTOSCOPY 57 31-57.33, 57.49 3 % WITH RETROGRADE PERCUTANEOUS OR TV PYELOGRAPHY 4 % WITH FULGURATION 57 49, 57 59 5 % WITH NORMAL URINARY FUNCTION AT DISCH	0-5 100 100 100 100
715 BENIGN BREAST DISEASE (PRINCIPAL DIAGNOSIS 217 OR 610) 1 MORTALITY RATE (%) 2 % WITH EXTERPATIVE SURGERY 85 20-85 25, 85 33-85 42 3 % WITH TISSUE CONFIRMING DIAGNOSIS 4 % WITH POSTOPERATIVE COMPLICATION 5 % WITH PROGRESS SATISFACTORY AT DISCH	0 100 100 0 100
716 UTERINE LEIOMYOMA (PRINCIPAL DIAGNOSIS 218) 1 MORTALITY RATE (%) 2 % WITH CURETTAGE, HYSTERECTOMY OR MYOMECTOMY 3 % TRANSFUSED 4 % WITH POSTOPERATIVE COMPLICATION 5 % WITH PROGRESS SATISFACTORY AT DISCH	0 100 0-10 0 100
717 CARCINOMA IN SITU OF CERVIX (PRINCIPAL DIAGNOSIS 233.1) 1 MORTALITY RATE (%) 2 % WITH MALIGNANT TISSUE REPORTED 3 % WITH CERVICAL PAPANICOLAOU 94 46 4 % WITH CURETTAGE 69 0 69 51 WITH CERVICAL BIOPSY OR CONE 67 12 67 12 67 2 5 % GIVEN RADIATION THERAPY 92 2 6 % WITH PROGRESS SATISFACTORY AT DISCH	0 100 100 100 0 100

PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS
730 DIABETES MELLITUS, PED ATRIC (PRINCIPAL DIAGNOSIS 250) 1 MORTALITY RATE (%) 2 % WITH FUNDUSCOPIC EXAM 3 % WITH REPEAT BLOOD SUGAR, STAY > 2 DAYS 4 % WITH ELECTROLYTE DETERMINATION 5 % GIVEN INSULIN 6 % GIVEN ORAL ANTIDIABETICS 7 % WITH PROGRESS SATISFACTORY AT DISCH	0 100 100 100 100 0 100
731 DIABETES MELLITUS, ADULT (PRINCIPAL DIAGNOSIS 250) 1 MORTALITY RATE (%) 2 % ADMITTED FOR UNCOMPLICATED DIABETES, 250 3 % WITH BLOOD SUGAR TEST 4 % WITH FUNDUSCOPIC EXAM 5 % WITH ELECTROLYTE DETERMINATION 6 % WITH COMPLICATIONS GIVEN ANTIDIABETIC 7 % WITH DISCH INSTRUCTIONS UNDERSTOOD	0 0 100 100 100 100 100
735 ANEMIA (PRINCIPAL DIAGNOSIS 280-285) 1 MORTALITY RATE (%) 2 % WITH ADMISSION HGB < 10 GM% OR HCT < 30% 3 % WITH RED CELL INDICES 4 % WITH SERUM IRON TEST 5 % WITH RETICULOCYTES, NUCLEATED RBC 6 % WITH STOOL FOR BLOOD 7 % TRANSFUSED GIVEN PACKED RBC, EXC 285 1 8 % WITH NORMAL OR RISING HGB/HCT AT DISCH	0 100 100 100 100 100 100 100
740 ORGANIC BRAIN SYNDROME (PRINCIPAL DIAGNOSIS 290, 294, OR 310) 1 MORTALITY RATE (%) 2 % WITH NITROGEN DERIVATIVES 3 % WITH SEROLOGICAL TEST FOR SYPHILIS 4 % GIVEN ELECTROCONVULSIVE THERAPY, 94 27 5 % ISOLATED 6 % WITH DECUBITUS ULCER, 707 0 7 % WITH PROGRESS SATISFACTORY AT DISCH	0 100 100 0 0 0 100
741 ALCOHOLIC WITHDRAWAL SYNDROME AND PSYCHOSES (PRINCIPAL DIAGNOSIS 291) 1 MORTALITY RATE (%) 2 % WITH THIS AS ONLY DX BUT WITH SIGNIFICANT ABN FINDING: HGB < 12, DIAS BP > 110, TEMP > 101 3 % WITH LIVER FUNCTION TEST 4 % GIVEN ELECTROCONVULSIVE THERAPY, 94 27 5 % GIVEN NEUROLEPTICS 6 % GIVEN ALCOHOL COUNSEL OR REFERRAL 94 46, 94 53 7 % WITH DISCH INSTRUCTIONS UNDERSTOOD	0 0 100 100 0 100 100
742 DRUG DEPENDENCE AND DRUG-INDUCED PSYCHOSES (PRINCIPAL DIAGNOSIS 292 OR 304) 1 MORTALITY RATE (%) 2 % WITH THIS ONLY DX, BUT WITH SIGNIFICANT ABN FINDING: HGB < 12, DIAS BP > 110, TEMP > 101 3 % WITH LIVER FUNCTION TEST 4 % GIVEN DRUG COUNSELING OR REFERRAL 94 45, 94 54 5 % WITH DISCH INSTRUCTIONS UNDERSTOOD	0 0 100 100 100
743 SCHIZOPHRENIA (PRINCIPAL DIAGNOSIS 295.0-295.3, 295.5-295.9) 1 MORTALITY RATE (%) 2 % GIVEN NEUROLEPTICS, EXCL LATENT, 295 5 3 % GIVEN PSYCHOTHERAPY 94 3, 94 41-44, 94 49 4 % GIVEN ELECTROCONVULSIVE THERAPY, 94 27 5 % WITH ADVERSE REACTION TO PSYCHOTROPIC, E939 6 % WITH PROGRESS SATISFACTORY AT DISCH	0 100 100 100 0 100

PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS
744 AFFECTIVE DISORDERS (PRINCIPAL DIAGNOSIS 296) <ol style="list-style-type: none"> 1. MORTALITY RATE (%) 2. % DEPRESSIVE AGE 40+ WITH THYROID FUNCTION 3. % MANIC GIVEN NEUROLEPTICS 4. % MANIC GIVEN ECT, 94 27 5. % DEPRESSIVE GIVEN ECT, 94 27 6. % DEPRESSIVE ISOLATED 7. % SEVERE CASES DISCHARGED AMA 8. % WITH PROGRESS SATISFACTORY AT DISCH 	0 100 100 0-10 0-30 0 0 100
745 NEUROSES AND PERSONALITY DISORDERS (PRINCIPAL DIAGNOSIS 300-302, 308-309) <ol style="list-style-type: none"> 1. MORTALITY RATE (%) 2. % WITH NEUROSIS AS ONLY DIAGNOSIS BUT SIGNIFICANT ABN FINDING: HGB<12, DIAS BP>110, TEMP>101 3. % GIVEN ELECTROCONVULSIVE THERAPY, 94 27 4. % GIVEN NEUROLEPTICS 5. % ISOLATED 6. % GIVEN PSYCHOTHERAPY, 94 3, 94 41-44, 94 49 7. % WITH PROGRESS SATISFACTORY AT DISCH 	0 0 0 0-5 0 100 100
746 ALCOHOL DEPENDENCE SYNDROME AS ANY DIAGNOSIS (ANY DIAGNOSIS 303) <ol style="list-style-type: none"> 1. MORTALITY RATE (%) 2. % WITH THIS AS ONLY DX, BUT WITH SIGNIFICANT ABN FINDING: HGB<12, DIAS BP>110, TEMP>101 3. % NOT ACUTELY INTOXICATED W/ LIVER FUNCT 4. % NOT ACUTELY INTOXICATED W/ BLOOD SUGAR 5. % GIVEN ALCOHOL COUNSEL OR REFERRAL 94 46, 94 53 6. % WITH ASPIRATION PNEUMONIA, 507 7. % WITH DISCH INSTRUCTIONS UNDERSTOOD 	0 0 100 100 100 0 100
747 PSYCHOPHYSIOLOGIC DISORDERS (PRINCIPAL DIAGNOSIS 306 OR 316) <ol style="list-style-type: none"> 1. MORTALITY RATE (%) 2. % WITH PSYCHIC FACTORS WITH ADD'L DX 3. % GIVEN ELECTROCONVULSIVE THERAPY, 94 27 4. % WITH CONSULTATION 5. % WITH DISCH INSTRUCTIONS UNDERSTOOD 	0 100 0 100 100
755 CONVULSIVE DISORDERS, PEDIATRIC (PRINCIPAL DIAGNOSIS 345 OR 780.3) <ol style="list-style-type: none"> 1. MORTALITY RATE (%) 2. % WITH EEG 3. % WITH DIAGNOSTIC EXAMINATION OF HEAD 4. % 3 YEARS+ WITH BLOOD SUGAR TEST 5. % WITH SERUM CALCIUM 6. % 6 MO OR UNDER WITH SPINAL TAP, 03 31 7. % WITH PROGRESS SATISFACTORY AT DISCH 	0 100 100 100 100 100 100
756 CONVULSIVE DISORDERS, ADULT (PRINCIPAL DIAGNOSIS 345 OR 780.3) <ol style="list-style-type: none"> 1. MORTALITY RATE (%) 2. % WITH EEG 3. % WITH DIAGNOSTIC EXAMINATION OF HEAD 4. % WITH MICRO EXAM OF CEREBROSPINAL FLUID, 90 0 5. % WITH STABLE VITAL SIGNS AT DISCH 	0 100 100 100 100
757 CHRONIC OTITIS MEDIA (PRINCIPAL DIAGNOSIS 381.1-381.4, 382.1-382.9) <ol style="list-style-type: none"> 1. MORTALITY RATE (%) 2. % GIVEN HEARING TEST 3. % WITH MASTOID X-RAY WITH OTORRHEA OR PERFORATION 382.1-382.2, 384.2, 388.60 4. % GIVEN ANTIBIOTICS 5. % WITH PROGRESS SATISFACTORY AT DISCH 	0 100 100 100 100

PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS
762 CHRONIC RHEUMATIC HEART DISEASE (PRINCIPAL DIAGNOSIS 393-398) <ol style="list-style-type: none"> 1. MORTALITY RATE (%) 2. % WITH RECORDED JUSTIFICATION FOR ADMISSION 3. % WITH ECG 4. % WITH CHEST X-RAY 5. % WITH PROGRESS SATISFACTORY AT DISCH 	0.5 100 100 100 100
763. ESSENTIAL HYPERTENSION (PRINCIPAL DIAGNOSIS 401) <ol style="list-style-type: none"> 1. MORTALITY RATE (%) 2. % WITH RECORDED JUSTIFICATION FOR ADMISSION 3. % WITH FUNDUSCOPIC EXAMINATION 4. % WITH ECG, NITROGEN DERIVATIVES, AND ELECTROLYTES 5. % GIVEN DIURETICS OR HYPOTENSIVES 6. % WITH DISCH INSTRUCTIONS UNDERSTOOD 	0.2 100 100 100 100 100
764 HYPERTENSIVE HEART DISEASE (PRINCIPAL DIAGNOSIS 402) <ol style="list-style-type: none"> 1. MORTALITY RATE (%) 2. % WITH RECORDED JUSTIFICATION FOR ADMISSION 3. % WITH ECG 4. % WITH CHEST X-RAY 5. % GIVEN CARDIAC REGULATORS 6. % GIVEN DIURETICS OR HYPOTENSIVES 7. % WITH PROGRESS SATISFACTORY AT DISCH 	0.5 100 100 100 100 100 100
765 ACUTE MYOCARDIAL INFARCTION (PRINCIPAL DIAGNOSIS 410) <ol style="list-style-type: none"> 1. MORTALITY RATE (%) 2. % WITH ABNORM ENZYMES OR ECG, STAY>2 DAYS 3. % WITH REPEAT ECG, STAY> 2 DAYS 4. % WITH REPEAT ENZYMES, STAY>2 DAYS 5. % MONITORED 6. % WITH VENTRICULAR FIB OR FLUTTER, 427 41-427 42 7. % WITH DISCH INSTRUCTIONS UNDERSTOOD 	15.20 100 100 100 100 0-1 100
766 ANGINA PECTORIS (PRINCIPAL DIAGNOSIS 413) <ol style="list-style-type: none"> 1. MORTALITY RATE (%) 2. % WITH ANGIOCARDIOGRAM, 88.5, OR REVASC, 36.1-36.3 3. % WITH ABNORMAL ENZYMES 4. % WITH REPEAT ECG 5. % WITH PROGRESS SATISFACTORY AT DISCH 	0 100 0 100 100
767 OTHER ACUTE AND SUBACUTE ISCHEMIC HEART DISEASE (PRINCIPAL DIAGNOSIS 411) <ol style="list-style-type: none"> 1. MORTALITY RATE (%) 2. % WITH ABNORMAL ENZYMES 3. % WITH REPEAT ECG, STAY>2 DAYS 4. % WITH CHEST X-RAY 5. % MONITORED 6. % FREE OF COMPLAINT AT DISCHARGE 	0 0 100 100 100 100
768 MISCELLANEOUS ISCHEMIC HEART DISEASE (PRINCIPAL DIAGNOSIS 412 OR 414) <ol style="list-style-type: none"> 1. MORTALITY RATE (%) 2. % WITH CORONARY ATHEROSCLEROSIS WITHOUT ADDITIONAL CARDIAC DX 390-413, 414.1, 415-429 3. % WITH ABNORMAL ENZYMES 4. % WITH ECG 5. % WITH CHEST X-RAY 6. % WITH PROGRESS SATISFACTORY AT DISCH 	5.10 0 0-10 100 100 100

PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS	PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS
769 PULMONARY EMBOLISM AS ANY DIAGNOSIS, MEDICAL (ANY DIAGNOSIS 415.1)		776 VARICOSE VEINS OF LEG (PRINCIPAL DIAGNOSIS 454)	
1. MORTALITY RATE (%)	0-5	1. MORTALITY RATE (%)	0
2. % WITH REPEAT CHEST X-RAY	100	2. % WITH LIGATION, STRIPPING, OR INJECT 38 59, 39 92	100
3. % WITH RADIOISOTOPE LUNG SCAN, 92 15	100	3. % WITHOUT ULCER OR INFLAMMATION (454 0-	
4. % GIVEN ANTICOAGULANTS	100	454.2) GIVEN ANTIBIOTICS	0
5. % WITH VENOUS LIGATION OR PLICATION	0-10	4. % WITH POSTOPERATIVE COMPLICATION	0
6. % WITH PROGRESS SATISFACTORY AT DISCH	100	5. % WITH PROGRESS SATISFACTORY AT DISCH	100
770 PULMONARY EMBOLISM AS ANY DIAGNOSIS, SURGICAL (ANY DIAGNOSIS 415.1)		800 ACUTE UPPER RESPIRATORY INFECTION (PRINCIPAL DIAGNOSIS 460-465)	
1. MORTALITY RATE (%)	0-5	1. MORTALITY RATE (%)	0
2. % WITH REPEAT CHEST X-RAY	100	2. % WITH RECORDED JUSTIFICATION FOR ADMISSION	100
3. % WITH LUNG SCAN, 92 15, OR ANGIOGRAPHY, 88 43-88 44	100	3. % WITH UPPER RESPIRATORY TRACT CULTURE	100
4. % GIVEN ANTICOAGULANTS	100	4. % OF THOSE GIVEN ANTIBIOTICS WITHOUT	
5. % WITH VENOUS LIGATION OR PLICATION	0-10	UR TRACT CULTURE, 90 32 OR 90 33	0
6. % WITH VITAL SIGNS STABLE AT DISCHARGE	100	5. % WITH PROGRESS SATISFACTORY AT DISCH	100
771 ARRHYTHMIA AND SLOWED CONDUCTION (PRINCIPAL DIAGNOSIS 426-427)		801 ACUTE BRONCHITIS PEDIATRIC (PRINCIPAL DIAGNOSIS 466)	
1. MORTALITY RATE (%)	0	1. MORTALITY RATE (%)	0
2. % WITH RECORDED JUSTIFICATION FOR ADMISSION	100	2. % WITH RECORDED JUSTIFICATION FOR ADMISSION	100
3. % MONITORED	100	3. % WITH CHEST X-RAY	100
4. % WITH ECG	100	4. % AFEBRILE AT DISCHARGE	100
5. % GIVEN CARDIAC REGULATORS	100		
6. % WITH VITAL SIGNS STABLE AT DISCHARGE	100		
772 HEART FAILURE (PRINCIPAL DIAGNOSIS 428)		802 ACUTE BRONCHITIS ADULT (PRINCIPAL DIAGNOSIS 466)	
1. MORTALITY RATE (%)	0-10	1. MORTALITY RATE (%)	0
2. % WITH ECG	100	2. % WITH RECORDED JUSTIFICATION FOR ADMISSION	100
3. % WITH ELECTROLYTE DETERMINATION	100	3. % WITH CHEST X-RAY	100
4. % WITH NITROGEN DERIVATIVES	100	4. % WITH PULMONARY FUNCTION TEST	100
5. % GIVEN DIURETICS	100	5. % GIVEN ANTIBIOTICS	100
6. % GIVEN CARDIAC REGULATORS	100	6. % GIVEN IPPB OR OTHER INHALATION RX	100
7. % WITH PROGRESS SATISFACTORY AT DISCH	100	7. % FREE OF COMPLAINT AT DISCHARGE	100
773 CEREBROVASCULAR DISEASE (PRINCIPAL DIAGNOSIS 430-438)		803 PNEUMONIA PEDIATRIC (PRINCIPAL DIAGNOSIS 480-486)	
1. MORTALITY RATE (%)	10-15	1. MORTALITY RATE (%)	0
2. % WITH RADIOGRAPHIC EXAM OF SKULL AND CNS	100	2. % WITH RECORDED JUSTIFICATION FOR ADMISSION	100
3. % WITH SPINAL TAP 03 01	100	3. % WITH CHEST X-RAY	100
4. % OF CVA PARALYZED GIVEN PT STAY > 2 DAYS	100	4. % 1 MONTH AND OLDER WITH TB SKIN TEST	0
5. % WITH DECUBITUS ULCER, 707 0	0	5. % GIVEN ANTIBIOTICS, EXC VIRAL, 480	100
6. % WITH VITAL SIGNS STABLE AT DISCHARGE	100	6. % WITH PROGRESS SATISFACTORY AT DISCH	100
774 ARTERIAL EMBOLISM AND THROMBOSIS (PRINCIPAL DIAGNOSIS 444)		804 PNEUMONIA ADULT (PRINCIPAL DIAGNOSIS 480-486)	
1. MORTALITY RATE (%)	0-5	1. MORTALITY RATE (%)	0-5
2. % WITH ABNORMAL ARTERIOGRAPHY, THERMOGRAPHY,	100	2. % WITH RECORDED JUSTIFICATION FOR ADMISSION	100
ARTIOGRAPHY, SCAN, OR ULTRASOUND	100	3. % WITH STAY > 7 DAYS WITH RPT CHEST X-RAY	100
3. % WITH COAGULATION TEST	100	4. % WITH LOWER RESP TRACT CULTURE 90 42 90 43	100
4. % GIVEN ANTICOAGULANTS	100	5. % WITH BLOOD CULTURE 90 52 OR 90 53	100
5. % AFEBRILE AT DISCHARGE	100	6. % WITH SENSITIVITY FOR POSITIVE CULTURE	100
		7. % GIVEN ANTIBIOTICS, EXC VIRAL, 480	100
		8. % WITH PROGRESS SATISFACTORY AT DISCH	100
775 PHLEBITIS AND THROMBOPHLEBITIS (PRINCIPAL DIAGNOSIS 451)		805 INFLUENZA (PRINCIPAL DIAGNOSIS 487)	
1. MORTALITY RATE (%)	0	1. MORTALITY RATE (%)	0
2. % WITH CHEST X-RAY, IMPEDANCE PHLEBOGRAPHY,	100	2. % WITH RECORDED JUSTIFICATION FOR ADMISSION	100
RADIOISOTOPE SCAN, OR ULTRASOUND	100	3. % WITH CHEST X-RAY	100
3. % WITH ECG	100	4. % WITH ANTIBIOTICS	100
4. % WITH COAGULATION TEST	100	5. % WITH EMPHYEMA, SPO, OR LUNG ABSCESS 513 0	0
5. % GIVEN ANTICOAGULANTS	100	6. % WITH PROGRESS SATISFACTORY AT DISCH	100
6. % AFEBRILE AT DISCHARGE	100		

PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS
806 EMPHYSEMA AND OTHER COPD (PRINCIPAL DIAGNOSIS 492, 494-496) 1. MORTALITY RATE (%) 2. % WITH ELECTROLYTE DETERMINATION 3. % WITH ECG 4. % WITH ARTERIAL BLOOD GASES 5. % WITH INHALATION THERAPY, INCL IPPB 6. % GIVEN ANXIOLYTICS OR NEUROLEPTICS 7. % WITH PROGRESS SATISFACTORY AT DISCH	0-10 100 100 100 100 0 100
807 ASTHMA, PEDIATRIC (PRINCIPAL DIAGNOSIS 493) 1. MORTALITY RATE (%) 2. % WITH ARTERIAL BLOOD GASES 3. % WITH CHEST X-RAY 4. % GIVEN ACTH/CORTICOSTEROIDS 5. % GIVEN ANXIOLYTICS OR NEUROLEPTICS 6. % GIVEN IPPB OR OTHER INHALATION RX 7. % WITH PROGRESS SATISFACTORY AT DISCH	0 100 100 100 0 100 100
808 ASTHMA, ADULT (PRINCIPAL DIAGNOSIS 493) 1. MORTALITY RATE (%) 2. % WITH RECORDED JUSTIFICATION FOR ADMISSION 3. % WITH ARTERIAL BLOOD GASES 4. % GIVEN ACTH/CORTICOSTEROIDS 5. % GIVEN ANXIOLYTICS OR NEUROLEPTICS 6. % GIVEN OXYGEN 7. % GIVEN IPPB OR OTHER INHALATION RX 8. % WITH PROGRESS SATISFACTORY AT DISCH	0 100 100 100 0 100 100 100
825 GASTRIC ULCER, UNCOMPLICATED (PRINCIPAL DIAGNOSIS 531.30, 531.70, OR 531.90) 1. MORTALITY RATE (%) 2. % WITH ENDOSCOPY, 44 11-44.13 3. % WITH BIOPSY, 44 14-44.15 4. % WITH UPPER GI X-RAY, 87.62 5. % TRANSFUSED 6. % WITH NORMAL GI FUNCTION AT DISCHARGE	0 100 100 100 0 100
826 NONGASTRIC PEPTIC ULCER (PRINCIPAL DIAGNOSIS 532-534 WITH .30, .70, OR .90) 1. MORTALITY RATE (%) 2. % COMPLICATED 3. % PERFORATED WHO HAD GASTRIC SURGERY 4. % UNPERF WITH UPPER GI X-RAY OR ENDOSC 5. % WITH STOOL FOR BLOOD 6. % W/O GASTRIC SURGERY TRANSF 6+ UNIT 7. % WITH NORMAL GI FUNCTION AT DISCHARGE	0 100 100 100 100 0 100
827 DIVERTICULAR DISEASE (PRINCIPAL DIAGNOSIS 562) 1. MORTALITY RATE (%) 2. % WITH LOWER GI X-RAY, 87.64 3. % WITH SIGMOIDOSCOPY, 48.23 4. % WITH DIVERTICULITIS GIVEN ANTIBIOTICS 5. % WITH NORMAL GI FUNCTION AT DISCHARGE	0 100 100 100 100
828 CIRCULOSIS (PRINCIPAL DIAGNOSIS 571) 1. MORTALITY RATE (%) 2. % WITH ENZYME STUDIES 3. % WITH ELECTROLYTE DETERMINATION 4. % WITH LIVER FUNCTION TEST 5. % WITH LIVER BIOPSY, 50 11, 50 12) WITH COAG STUDY AND LIVER OR SPLEEN SCAN 6. % WITH PROGRESS SATISFACTORY AT DISCH	0-5 100 100 100 100 100

PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS
829 DISEASE OF PANCREAS, MEDICAL (PRINCIPAL DIAGNOSIS 577) 1. MORTALITY RATE (%) 2. % WITH SERUM AMYLASE 3. % WITH ENZYME STUDY 4. % WITH LIVER FUNCTION TEST 5. % WITH BILIARY X-RAY, PANCREATOGRAM, OR ULTRASOUND 6. % WITH NORMAL GI FUNCTION AT DISCHARGE	0 100 100 100 100 100
830 DISEASE OF PANCREAS, SURGICAL (PRINCIPAL DIAGNOSIS 577) 1. MORTALITY RATE (%) 2. % WITH SERUM AMYLASE 3. % WITH LIVER FUNCTION TEST 4. % WITH GB SERIES, RETROGRADE CANNULA, OR IV CHOLANG 5. % ACUTE PANCREATITIS PATIENTS OPERATED 6. % WITH NORMAL GI FUNCTION AT DISCHARGE	0 100 100 100 0 100
831 GASTROINTESTINAL HEMORRHAGE (PRINCIPAL DIAGNOSIS 578) 1. MORTALITY RATE (%) 2. AUTOPSY RATE (%) 3. % WITH COAGULATION STUDY 4. % WITH PROCTOSIGMOIDOSCOPY, EXC 578.0 5. % WITH GI X-RAY, 87.61-87.65 6. % WITH NORMAL GI FUNCTION AT DISCHARGE	0 100 100 100 100 100
845 ACUTE PYELONEPHRITIS (PRINCIPAL DIAGNOSIS 590.1) 1. MORTALITY RATE (%) 2. % WITH ADMISSION TEMP, 101 (38.3) OR HIGHER 3. % WITH POSITIVE URINE CULTURE, 91.32, 91.33 4. % WITH IVP, 87.73 5. % GIVEN ANTIBIOTICS OR OTHER ANTI-INFECTIVES 6. % AFEBRILE AT DISCHARGE	0 100 100 100 100 100
846 RENAL CALCULUS (PRINCIPAL DIAGNOSIS 592.0) 1. MORTALITY RATE (%) 2. % WITH URINE CULTURE, 91.32, 91.33 3. % WITH RETROGRADE, PERCUTANEOUS OR IV PYELOGRAPHY 4. % WITH POSTOPERATIVE COMPLICATION 5. % WITH NORMAL URINARY FUNCTION AT DISCH	0 100 100 0 100
847 URETERAL CALCULUS (PRINCIPAL DIAGNOSIS 592.1) 1. MORTALITY RATE (%) 2. % WITH SERUM CALC'UM 3. % WITH RETROGRADE, PERCUTANEOUS OR IV PYELOGRAPHY 4. % WITH NORMAL URINARY FUNCTION AT DISCH	0 100 100 100
848 CYSTITIS (PRINCIPAL DIAGNOSIS 595) 1. MORTALITY RATE (%) 2. % WITH POSITIVE URINE CULTURE, 91.32, 91.33 3. % WITH URINALYSIS 4. % WITH CYSTOSCOPY, 57.31, 57.32 5. % GIVEN ANTIBIOTICS OR OTHER ANTI-INFECTIVES 6. % WITH NORMAL URINARY FUNCTION AT DISCH	0 100 100 100 100 100
849 BENIGN PROSTATIC HYPERTROPHY (PRINCIPAL DIAGNOSIS 600) 1. MORTALITY RATE (%) 2. % WITH RETROGRADE, PERCUTANEOUS OR IV PYELOGRAPHY 3. % WITH PROSTATECTOMY OR CYSTOSCOPY 4. % WITH POSTOPERATIVE COMPLICATIONS 5. % WITH NORMAL URINARY FUNCTION AT DISCH	0 100 100 0 100

PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS	PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS
850 DISORDERS OF MENSTRUATION (PRINCIPAL DIAGNOSIS 626.0-626.9) <ol style="list-style-type: none"> MORTALITY RATE (%) % WITH D&C OR ASPIRATION CURETTAGE 69 0, 69 5 % UNDER 40 WITH HYSTERECTOMY, 68 3-68 8 % TRANSFUSED % WITH POSTOPERATIVE COMPLICATION % WITH PROGRESS SATISFACTORY AT DISCH 	0 100 0-10 0-5 0 100	882 CHEST PAIN (PRINCIPAL DIAGNOSIS 786.5) <ol style="list-style-type: none"> MORTALITY RATE (%) AUTOPSY RATE % WITH REPEAT ECG % WITH REPEAT ENZYMES % WITH CHEST X-RAY % FREE OF COMPLAINT AT DISCHARGE 	100 100 100 100 100 100
860 ABORTION AS ANY DIAGNOSIS (ANY DIAGNOSIS 634-637) <ol style="list-style-type: none"> MORTALITY RATE (%) % ADMITTED AS INCOMPLETE, EXC INDUCED % WITH PELVIC EXAM % WITH D&C OR ASPIRATION CURETTAGE 69 0, 69 5 % TRANSFUSED % WITH POSTOPERATIVE COMPLICATION % WITH PROGRESS SATISFACTORY AT DISCH 	0 100 100 100 0-10 0 100	883 ABDOMINAL PAIN (PRINCIPAL DIAGNOSIS 789.0) <ol style="list-style-type: none"> MORTALITY RATE (%) AUTOPSY RATE (%) % WITH CHEST X-RAY % WITH ABDOMINAL X-RAY 88 01-88 02, 88.19 % WITH SERUM AMYLASE TEST % WITH RECTAL EXAM % FEMALES WITH PELVIC EXAM % GIVEN ANTIBIOTICS % TRANSFUSED % FREE OF COMPLAINT AT DISCHARGE 	0 100 100 100 100 100 100 100 100 100
861 DELIVERY AS ANY DIAGNOSIS (ANY DIAGNOSIS 641-676, 5TH DIGIT 0, 1, 2 WHERE APPLICABLE) <ol style="list-style-type: none"> MORTALITY RATE (%) % DELIVERING STILLBORN % DELIVERED BY C-SECTION 74 0-74 2, 74 4, 74 99 % DELIVERED WITH HIGH FORCEPS, 72 3 % DELIVERED WITH MID-FORCEPS, 72 2 % WITH CEPHALOPELVIC DISPROPORTION OR PROLONGED LABOR MONITORED % WITH SELECTED DELIVERY COMPLICATIONS % WITH COMPLICATIONS OF PUERPERIUM % TRANSFUSED 	0 0-1 5-15 0 0-5 100 0 0-2	890 FRACTURE OF RADIUS OR ULNA (PRINCIPAL DIAGNOSIS 813) <ol style="list-style-type: none"> MORTALITY RATE (%) % WITH SKELETAL X-RAY, 88 22-88 24 % WITH FRACTURE REDUCTION 89 0-79 3, 4TH DIGIT 2 % WITH POSTOPERATIVE COMPLICATION % WITH PROGRESS SATISFACTORY AT DISCH 	100 100 100 100 100
862 BREECH PRESENTATION, DELIVERED AS ANY DIAGNOSIS (ANY DIAGNOSIS 652.2, 669.6 WITH 5TH DIGIT 0, 1, OR 2) <ol style="list-style-type: none"> MORTALITY RATE (%) % DELIVERING STILLBORN % WITH PERINEAL OR CERVICAL LACERATION % WITH PROGRESS SATISFACTORY AT DISCH 	0 0-1 0-5 100	891 FRACTURE OF UPPER END OF FEMUR (PRINCIPAL DIAGNOSIS 820) <ol style="list-style-type: none"> MORTALITY RATE (%) % WITH SKELETAL X-RAY 88 26-88 27, 88 29, 88 31 % WITH OPEN REDUCTION OR REPLACEMENT % OPERATED WITHIN 3 DAYS % WITH POSTOPERATIVE COMPLICATION % WITH PROGRESS SATISFACTORY AT DISCH 	100 100 100 100 100
875 RHEUMATOID ARTHRITIS (PRINCIPAL DIAGNOSIS 714) <ol style="list-style-type: none"> MORTALITY RATE (%) % WITH SKELETAL X-RAY 87.13, 87 16-87 2, 88 2-88 33 % WITH SEDIMENTATION RATE % WITH SEROLOGY STUDIES % GIVEN PHYSICAL THERAPY 93 1-93 3 % WITH PROGRESS SATISFACTORY AT DISCH 	0 100 100 100 100 100	892 CONCUSSION (PRINCIPAL DIAGNOSIS 850) <ol style="list-style-type: none"> MORTALITY RATE (%) % WITH DIAGNOSTIC EXAMINATION OF HEAD % GIVEN ANTIOLYTICS OR NEURILEPTICS % WITH VITAL SIGNS STABLE AT DISCHARGE 	100 100 100 100
876 DERANGEMENT AND DISPLACEMENT OF LUMBAR DISK (PRINCIPAL DIAGNOSIS 722.00, 32, 50, 13, 83, 93) <ol style="list-style-type: none"> MORTALITY RATE (%) % WITH MYELOGRAM, TRACTION, EXCISION OR FUSION % GIVEN PHYSICAL THERAPY 93 1-93 3 % WITH POSTOPERATIVE COMPLICATION % AMBULATORY AT DISCHARGE 	0 100 100 0 100	ALL OPERATED PATIENTS	
88 HEADACHE (PRINCIPAL DIAGNOSIS 784.0) <ol style="list-style-type: none"> MORTALITY RATE (%) % WITH DIAGNOSTIC EXAMINATION OF HEAD % WITH FUNDUSCOPIC EXAMINATION % WITH SPINAL TAP 93 31 % WITH EEG % FREE OF COMPLAINT AT DISCHARGE 	0 100 100 100 100 100	901 ALL PATIENTS WITH OPERATIONS <ol style="list-style-type: none"> % WHO DIED IN OPERATING ROOM % WITH PREOPERATIVE ANESTHESIA EVALUATION % WITH SELECTED OPS WITH TISSUE CODED 	100 100 100
		902 OPERATED PATIENTS GIVEN GENERAL ANESTHESIA <ol style="list-style-type: none"> % WITH PREANESTHESIA EVALUATION % WITH ADMISSION HGB (HCT) RECORDED % WITH ADMISSION URINALYSIS RECORDED % AGE 40+ WITH CHEST X-RAY % AGE 40+ WITH ECG % WITH ADVERSE EFFECT FROM OVERDOSE OR WRONG % WITH OTHER ANESTHESIA MISADVENTURE 	100 100 100 100 100 100 100
		OPERATED PATIENTS EXCISE MYOMYOM	
		901 ALL PATIENTS WITH OPERATIONS <ol style="list-style-type: none"> % WHO DIED IN OPERATING ROOM % WITH PREOPERATIVE ANESTHESIA EVALUATION % WITH SELECTED OPS WITH TISSUE CODED 	100 100 100

CPHA

PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS
902 OPERATED PATIENTS GIVEN GENERAL ANESTHESIA	
1 % WITH PREANESTHESIA EVALUATION	100
2 % WITH ADMISSION HGB (HCT) RECORDED	100
3 % WITH ADMISSION URINALYSIS RECORDED	100
4 % AGE 40+ WITH CHEST X-RAY	100
5 % AGE 40+ WITH ECG	100
6 % WITH ADVERSE EFFECT FROM OVERDOSE OR WRONG ANES	0
7 % WITH OTHER ANESTHESIA MISADVENTURE	0
OPERATED OB-GYN PATIENTS	
901 ALL PATIENTS WITH OPERATIONS	
1 % WHO DIED IN OPERATING ROOM	0
2 % WITH PREOPERATIVE ANESTHESIA EVALUATION	100
3 % WITH SELECTED OPS WITH TISSUE CODED	100
902 OPERATED PATIENTS GIVEN GENERAL ANESTHESIA	
1 % WITH PREANESTHESIA EVALUATION	100
2 % WITH ADMISSION HGB (HCT) RECORDED	100
3 % WITH ADMISSION URINALYSIS RECORDED	100
4 % AGE 40+ WITH CHEST X-RAY	100
5 % AGE 40+ WITH ECG	100
6 % WITH ADVERSE EFFECT FROM OVERDOSE OR WRONG ANES	0
7 % WITH OTHER ANESTHESIA MISADVENTURE	0
PROCEDURE GROUPS	
912 LENS EXTRACTION (ANY PROCEDURE 13.1-13.6)	
1 MORTALITY RATE (%)	0
2 % WITH VISION TESTING, 95 01-95 03	100
3 % WITH BLOOD SUGAR TEST	100
4 % WITH POSTOPERATIVE COMPLICATION	0
5 % WITH DISCH INSTRUCTIONS UNDERSTOOD	100
924 TOOTH EXTRACTION (ANY PROCEDURE 23.0-23.1)	
1 MORTALITY RATE (%)	0
2 % WITH POSTOPERATIVE COMPLICATION	0
3 % WITH DISCH INSTRUCTIONS UNDERSTOOD	100
921 TONSILLECTOMY AND ADENOIDECTOMY (ANY PROCEDURE 28.2, 28.3, OR 28.6)	
1 MORTALITY RATE (%)	0
2 % UNDER 1 YEARS OF AGE	0
3 % TRANSFUSED	0
4 % WITH POSTOPERATIVE COMPLICATION	0
5 % WITH PEAK TEMPERATURE 102.4-91	0
6 % WITH PROGRESS SATISFACTORY AT DISCH	100
930 OPEN HEART SURGERY (ANY PROCEDURE 35.10-35.51, 35.53-35.99, 37.5-37.64)	
1 MORTALITY RATE (%)	0
2 % WITH CARDIAC DIAGNOSIS 390-398, 402, 404, 410-429	100
3 % WITH CHEST X-RAY	100
4 % WITH ECG	100
5 % WITH INTAKE-OUTPUT MONITORED	100
6 % WITH POSTOPERATIVE COMPLICATION	0
7 % WITH DISCH INSTRUCTIONS UNDERSTOOD	100

PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS
931 CARDIAC CATHETERIZATION (ANY PROCEDURE 37.21-37.33)	
1 MORTALITY RATE (%)	0
2 % WITH USUAL INDICATION 390-398, 411-414, 745-747	100
3 % WITH ECG	100
4 % WITH ISCHEMIC HEART DISEASE (411-414) WITH ENZYME STUDY	100
5 % WITH POSTOPERATIVE COMPLICATION	0
6 % WITH DISCH INSTRUCTIONS UNDERSTOOD	100
937 PRIMARY APPENDECTOMY (PRINCIPAL PROCEDURE 47.0)	
1 MORTALITY RATE (%)	0
2 % WITH NORMAL TISSUE	100
3 % WITH WBC AND DIFFERENTIAL	100
4 % WITH POSTOPERATIVE COMPLICATION	0
5 % WITH NORMAL GI FUNCTION AT DISCHARGE	100
938 HEMORRHOIDECTOMY (ANY PROCEDURE 49.46)	
1 MORTALITY RATE (%)	0
2 % WITH TISSUE CODED	100
3 % WITH ENDOSCOPIC PROCEDURE, 45.23, 45.24, OR 48.23	100
4 % WITH POSTOPERATIVE COMPLICATION	0
5 % WITH NORMAL GI FUNCTION AT DISCHARGE	100
939 CHOLECYSTECTOMY (ANY PROCEDURE 51.21 OR 51.22)	
1 MORTALITY RATE (%)	0
2 % WITH NORMAL TISSUE	0
3 % WITH LIVER FUNCTION STUDY	100
4 % WITH BILIARY TRACT X-RAY 87 51-87 59	100
5 % TRANSFUSED	0
6 % WITH POSTOPERATIVE COMPLICATION	0
7 % WITH PROGRESS SATISFACTORY AT DISCH	100
940 INGUINAL OR FEMORAL HERNIORRHAPHY (ANY PROCEDURE 53.00-53.39)	
1 MORTALITY RATE (%)	0
2 % WITH RECTAL EXAM	100
3 % WITH POSTOPERATIVE COMPLICATION	0
4 % WITH PROGRESS SATISFACTORY AT DISCH	100
955 PROSTATECTOMY (ANY PROCEDURE 60.2-60.6)	
1 MORTALITY RATE (%)	0
2 % WITH TISSUE CODED	100
3 % WITH RETROGRADE, PERCUTANEOUS, OR IV PYELOGRAPHY, CYSTOSCOPY, OR NITROGEN DERIVATIVE TEST	100
4 % WITH URINE CULTURE 91 32-91 33	100
5 % WITH INTAKE-OUTPUT MONITORED	100
6 % WITH POSTOPERATIVE COMPLICATION	0
7 % WITH NORMAL URINARY FUNCTION AT DISCH	100
960 TUBAL LIGATION (ANY PROCEDURE 66.2-66.3, 66.5, OR 66.63)	
1 MORTALITY RATE (%)	0
2 % WITH PELVIC EXAM	100
3 % WITH POSTOPERATIVE COMPLICATION	0
4 % WITH PROGRESS SATISFACTORY AT DISCH	100

PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS	PATIENT GROUPS AND MONITOR PARAMETERS	SUGGESTED STANDARDS
96 ABDOMINAL HYSTERECTOMY (ANY PROCEDURE 68.3-68.4)	1 MORTALITY RATE (%) 0 2 % WITH USUAL INDICATIONS 100 3 % WITH NORMAL TISSUE 0 4 % WITH SUBTOTAL HYSTERECTOMY, 68.3 100 5 % WITH PELVIC EXAM 0 6 % TRANSFUSED 0-15 7 % WITH PEAK TEMPERATURE 102 OR HIGHER 0 8 % WITH POSTOPERATIVE COMPLICATION 0 9 % WITH PROGRESS SATISFACTORY AT DISCH 100	971 CLOSED OPEN FRACTURE REDUCTION EXC MAX LIGAMENT (ANY PROCEDURE 79.0-79.5)	1 MORTALITY RATE (%) 0 2 % WITH SKELETAL X-RAY 100 3 % OF THOSE WITH OPEN REDUCTION, 79.2-79.3 OR 79.5, WITH POSTOPERATIVE COMPLICATION 0 4 % WITH PROGRESS SATISFACTORY AT DISCH 100
962 VAGINAL HYSTERECTOMY (ANY PROCEDURE 68.5)	1 MORTALITY RATE (%) 0 2 % WITH TISSUE CODED 100 3 % WITH PELVIC EXAM 100 4 % WITH PEAK TEMPERATURE 102 OR HIGHER 0 5 % WITH POSTOPERATIVE COMPLICATION 0 6 % WITH HGB NORMAL OR RISING AT DISCH 100	980 LOCAL EXCISION OF BREAST WITHOUT MASTECTOMY (ANY PROCEDURE 85.11-85.12, 85.20-85.23, 85.41, 48)	1 MORTALITY RATE (%) 100 2 % WITH TISSUE CODED 100 3 % WITH CA WITH SKEL X-RAY OR BONE SCAN 100 4 % WITH CA WITH CHEST X-RAY 100 5 % WITH CA WITH BEAM CHEMO OR IMMUNE RX 100 6 % WITH POSTOPERATIVE COMPLICATION 100 7 % WITH PROGRESS SATISFACTORY AT DISCH 100
963 D&C, ASPIRATION EXCEPT TO TERMINATE PREGNANCY (ANY PROCEDURE 69.02, 69.09, 69.52 OR 69.59)	1 MORTALITY RATE (%) 0 2 % WITH USUAL INDICATIONS 100 3 % WITH NORMAL TISSUE AFTER DELIV. ABORT 0 4 % WITH PELVIC EXAM 100 5 % WITH POSTOPERATIVE COMPLICATION 0 6 % WITH PROGRESS SATISFACTORY AT DISCH 100	981 MASTECTOMY (ANY PROCEDURE 85.41-85.48)	1 MORTALITY RATE (%) 100 2 % WITH MALIGNANT OR BENIGN NEOPLASM TISSUE REPORT 100 3 % WITH CA WITH BONE SCAN 92-94 100 4 % TRANSFUSED 0 5 % WITH POSTOPERATIVE COMPLICATION 100 6 % WITH PROGRESS SATISFACTORY AT DISCH 100
967 CESAREAN SECTION (ANY PROCEDURE 74.0-74.2, 74.4, OR 74.99)	1 MORTALITY RATE (%) 0 2 % WITH USUAL INDICATION 100 3 % WITH LOW CERVICAL SECTION, 74.1 100 4 % TRANSFUSED 0 5 % WITH PEAK TEMPERATURE 102 OR HIGHER 0 6 % WITH POSTOPERATIVE COMPLICATION 0 7 % WITH PROGRESS SATISFACTORY AT DISCH 100	982 LOCAL EXCISION OF SKIN LESION (ANY PROCEDURE 86.21-86.3)	1 MORTALITY RATE (%) 0 2 % WITH TISSUE CODED 100 3 % WITH THIS AS PRINCIPAL PROCEDURE GIVEN GEN ANESTHESIA, EXC LESION OF VULVA 0 4 % WITH POSTOPERATIVE COMPLICATION 0 5 % WITH DISCH INSTRUCTIONS UNDERSTOOD 100

CPIA

QAM

Quality Assurance Monitor

Fourth Generation

BASIC STATISTICS AND CRITERIA LIST

(Includes Suggested Standards)

A comparison of criteria available from the PAS Quality Control
Data Set and the Basic Data Set

CPHA
SAMPLE HOSPITAL
105, CPMA

Quality Assurance Monitor
Monitor Profile

Control Group: 5,506,355 PATIENTS
626 HOSPITALS
U. S. NORTH CENTRAL REGION
TIME PERIOD: JAN 77 - DEC 77

PAS
Professional Activity Study
Page 12 of 28
0026
JUL-SEP 80

DEPT. OF MEDICINE

CRITERIA	STANDARDS		HOSPITAL PERFORMANCE % BY TIME PERIOD										PROFILE	
	SUGGESTED	HOSPITAL	HOSPITAL PERFORMANCE % BY TIME PERIOD										H	S
			THIS TIME PERIOD	LAST TIME PERIOD	LAST YEAR	LAST 5 YEARS	LAST 10 YEARS	LAST 15 YEARS	LAST 20 YEARS	LAST 25 YEARS	LAST 30 YEARS	LAST 35 YEARS		
764. HYPERTENSIVE HEART DISEASE (PRINCIPAL DIAGNOSIS 402)														
TOTAL PATIENTS	2													
% OF ALL PATIENTS FOR THIS REPORT														
FATILITY INDEX	0.00													
AVERAGE STAY	8.8													
MEDIAN STAY	8													
AVERAGE CHARGE	\$1,132													
CHARGE INDEX	0.57													
1. MORTALITY RATE (%)														
2. % WITH RECORDED JUSTIFICATION FOR ADMISSION	100	100	100	100	100	100	100	100	100	100	100	100	100	100
3. % WITH ECG	100	100	100	100	100	100	100	100	100	100	100	100	100	100
4. % WITH CHEST X-RAY	100	100	100	100	100	100	100	100	100	100	100	100	100	100
5. % GIVEN CARDIAC REGULATORS	100	100	100	100	100	100	100	100	100	100	100	100	100	100
6. % GIVEN DIURETICS OR HYPOTENSIVES	100	100	100	100	100	100	100	100	100	100	100	100	100	100
7. % WITH PROGRESS SATISFACTORY AT DISCH	100	100	100	100	100	100	100	100	100	100	100	100	100	100
765. ACUTE MYOCARDIAL INFARCTION (PRINCIPAL DIAGNOSIS 410)														
TOTAL PATIENTS	80													
% OF ALL PATIENTS FOR THIS REPORT	2													
FATILITY INDEX	0.36													
AVERAGE STAY	11.9													
MEDIAN STAY	18													
AVERAGE CHARGE	\$3,956													
CHARGE INDEX	1.07													
1. MORTALITY RATE (%)														
2. % WITH ABN ENZYMES OR ECG, STAY > 2 DAYS	100	100	100	100	100	100	100	100	100	100	100	100	100	100
3. % WITH REPEAT ECG, STAY > 2 DAYS	100	100	100	100	100	100	100	100	100	100	100	100	100	100
4. % WITH REPEAT ENZYMES, STAY > 2 DAYS	100	100	100	100	100	100	100	100	100	100	100	100	100	100
5. % MONITORED	100	100	100	100	100	100	100	100	100	100	100	100	100	100
6. % WITH VENTRICULAR FIB OR FLUTTER, 427.41-427.42	100	100	100	100	100	100	100	100	100	100	100	100	100	100
7. % WITH DISCH INSTRUCTIONS UNDERSTOOD	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Q * * *

Form 870

DATE PREPARED: JAN 16, 1981

TIME PERIOD: JUL-SEP 1980

DEPT. OF MEDICINE

Page 12 of 28

Copyright 1978 by Commission on Professional and Hospital Activities, Ann Arbor, Michigan. Printed in U.S.A.

CPHA

Quality Assurance Monitor Priority For Investigation

SAMPLE HOSPITAL
105, CPHA

QUALITY ASSURANCE MONITOR

CONTROL GROUP

U.S. NORTH CENTRAL REGION
PATIENTS: 4,621,152
HOSPITALS: 642
TIME PERIOD: JAN-DEC 79

The content of this report is based on a comparison of the hospital performance measured in the Monitor Profile against the suggested standards, thresholds for investigation, and regional norms. (See the back of this report for definitions of these terms.)

The groups monitored in QAM are presented in two lists:

1. "QAM GROUPS WITH NO MATERIAL DEVIATIONS"

These are the patient groups in which hospital performance for each criterion either met the suggested standard or was above the threshold for investigation. These groups are listed separately because further investigation into the care of these patients may be considered of low priority relative to those in groups where material deviations occur.

2. "HIGHEST for SECOND, THIRD, or FOURTH) PRIORITY FOR INVESTIGATION"

QAM groups with material deviations (hospital performance for at least one criterion is below the threshold) are analyzed by a statistical method which takes into account the nature of the criterion, the degree of the deviation, and the proportion of criteria with material deviations.

For more explanation of how the suggested priorities are determined, refer to the back of this report

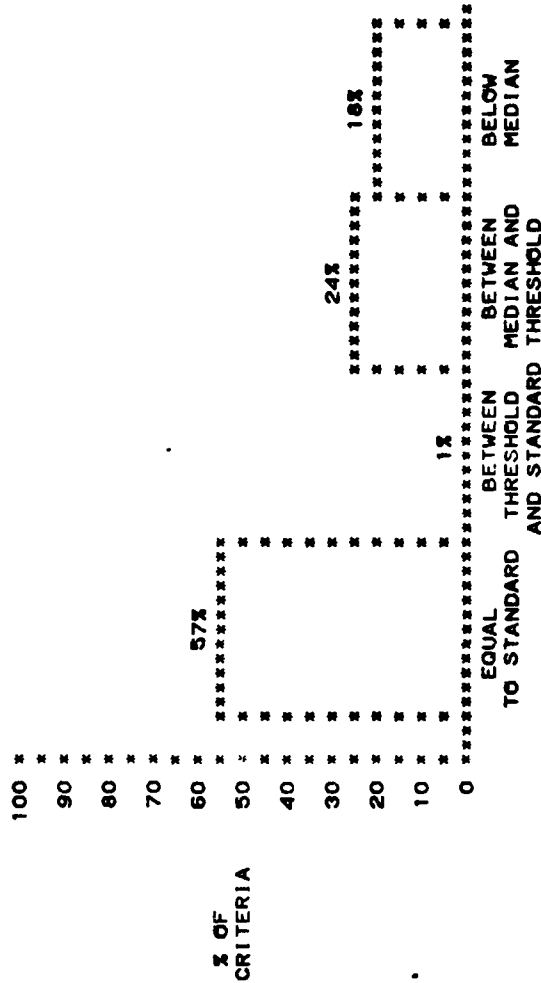
PAS
Professional Activity Study
Page 1 **
JUL-SEP 1
002

ALL HOSPITAL SUMMARY

QAM Group

Total
Patients
-2-

PERFORMANCE SUMMARY



HOSPITAL PERFORMANCE *

* YOUR PERFORMANCE FOR 1156 CRITERIA WAS USED FOR THIS GRAPH. SEE THE BACK OF THIS REPORT FOR DEFINITIONS OF STANDARD, THRESHOLD, AND MEDIAN.

DATE PREPARED:

MAY 22, 1982

TIME PERIOD

JUL-SEP 1980

ALL HOSPITAL SUMMARY

Page

1 **

PF

CPIA

Quality Assurance Monitor Priority For Investigation

SAMPLE HOSPITAL
IDS, CPHA

QUALITY ASSURANCE MONITOR

CONTROL GROUP

U.S. NORTH CENTRAL REGION
PATIENTS: 4,621,152
HOSPITALS: 642
TIME PERIOD: JAN-DEC 79

The content of this report is based on a comparison of the hospital performance measured in the Monitor Profile against the suggested standards, thresholds for investigation, and regional norms. (See the back of this report for definitions of these terms.)

The groups monitored in QAM are presented in two lists:

1. "QAM GROUPS WITH NO MATERIAL DEVIATIONS"

These are the patient groups in which hospital performance for each criterion either met the suggested standard or was above the threshold for investigation. These groups are listed separately because further investigation into the care of these patients may be considered of low priority relative to those in groups where material deviations occur.

2. "HIGHEST (or SECOND, THIRD, or FOURTH) PRIORITY FOR INVESTIGATION"

QAM groups with material deviations (hospital performance for at least one criterion is below the threshold) are analyzed by a statistical method which takes into account the nature of the criterion, the degree of the deviation, and the proportion of criteria with material deviations

For more explanation of how the suggested priorities are determined, refer to the back of this report

PFI

PAS

Professional Activity Study

Page

1 of 48

0026

JUL-SEP 80

ALL HOSPITAL SUMMARY

QAM Group

Total
Patients

2

NO MATERIAL DEVIATIONS

764. HYPERTENSIVE HEART DISEASE
(PRINCIPAL DIAGNOSIS 402)
713. MALIGNANT NEOPLASM OF PROSTATE
(PRINCIPAL DIAGNOSIS 185)
828. CIRRHOSIS
(PRINCIPAL DIAGNOSIS 571)
890. FRACTURE OF RADIUS OR ULNA
(PRINCIPAL DIAGNOSIS 813)
402. PATIENTS WITH ELEVATED ADM DIAS BP (EXC PREGNANCY)
862. BREECH PRESENTATION, DELIVERED AS ANY DIAGNOSIS
(ANY DIAGNOSIS 652.2, 669.6 WITH 5TH DIGIT 0, 1 OR 2)

DEPARTMENT OF:

- MEDICINE
SURGERY
SURGERY
SURGERY
OB-GYN
OB-GYN

DATE PREPARED

MAY 22, 1982

TIME PERIOD

JUL-SEP 1980

Page

ALL HOSPITAL SUMMARY

1 of 48

Quality Assurance Monitor Priority For Investigation

SAMPLE HOSPITAL
IDS, CPHA

QUALITY ASSURANCE MONITOR

CONTROL GROUP

U.S. NORTH CENTRAL REGION
PATIENTS: 4,621,152
HOSPITALS: 642
TIME PERIOD: JAN-DEC 79

The content of this report is based on a comparison of the hospital performance measured in the Monitor Profile against the suggested standards, thresholds for investigation, and regional norms. (See the back of this report for definitions of these terms.)

The groups monitored in QAM are presented in two lists:

1. "QAM GROUPS WITH NO MATERIAL DEVIATIONS"

These are the patient groups in which hospital performance for each criterion either met the suggested standard or was above the threshold for investigation. These groups are listed separately because further investigation into the care of these patients may be considered of low priority relative to those in groups where material deviations occur.

2. "HIGHEST (or SECOND, THIRD, or FOURTH) PRIORITY FOR INVESTIGATION"

QAM groups with material deviations (hospital performance for at least one criterion is below the threshold) are analyzed by a statistical method which takes into account the nature of the criterion, the degree of the deviation, and the proportion of criteria with material deviations.

For more explanation of how the suggested priorities are determined, refer to the back of this report.

PAS

Professional Activity Study
Page 2 of 2

0026
JUL-SEP 80

ALL HOSPITAL SUMMARY

QAM Group

HIGHEST PRIORITY FOR INVESTIGATION	DEPARTMENT OF:	Total Patients
001. ALL PATIENTS, BASIC WORKUP	HOSPITALWIDE	2,211
002. PATIENTS WITH ELEVATED ADM DIAS BP (EXC PREGNANCY)	HOSPITALWIDE	29
108. PATIENTS GIVEN ANTIBIOTICS	PEDIATRIC MEDICINE	92
109. PATIENTS GIVEN DIURETICS	PEDIATRIC MEDICINE	14
892. CONCUSSION	PEDIATRIC MEDICINE	12
(PRINCIPAL DIAGNOSIS 850)		
201. ALL PATIENTS, BASIC WORKUP	MEDICINE	881
202. PATIENTS WITH ELEVATED ADM DIAS BP (EXC PREGNANCY)	MEDICINE	15
206. PATIENTS WITH URINE POSITIVE FOR SUGAR	MEDICINE	52
711. MALIGNANT NEOPLASM OF LUNG, BRONCHUS, TRACHEA	MEDICINE	4
(PRINCIPAL DIAGNOSIS 162)		
712. MALIGNANT NEOPLASM OF BREAST	MEDICINE	1
(PRINCIPAL DIAGNOSIS 174-175)		
716. UTERINE LEIOMYOMA	MEDICINE	1
(PRINCIPAL DIAGNOSIS 218)		
731. DIABETES MELLITUS, ADULT	MEDICINE	35
(PRINCIPAL DIAGNOSIS 250)		
735. ANEMIA	MEDICINE	6
(PRINCIPAL DIAGNOSIS 280-285)		
765. ACUTE MYOCARDIAL INFARCTION	MEDICINE	20
(PRINCIPAL DIAGNOSIS 410)		
773. CEREBROVASCULAR DISEASE	MEDICINE	28
(PRINCIPAL DIAGNOSIS 430-438)		
775. PHLEBITIS AND THROMBOPHLEBITIS	MEDICINE	5
(PRINCIPAL DIAGNOSIS 451)		
776. VARICOSE VEINS OF LEG	MEDICINE	2
(PRINCIPAL DIAGNOSIS 454)		
828. CIRRHOSIS	MEDICINE	6
(PRINCIPAL DIAGNOSIS 571)		
847. UTERAL CALCULUS	MEDICINE	3
(PRINCIPAL DIAGNOSIS 592.1)		
849. BENIGN PROSTATIC HYPERTROPHY	MEDICINE	3
(PRINCIPAL DIAGNOSIS 600)		
850. DISORDERS OF MENSTRUATION	MEDICINE	2
(PRINCIPAL DIAGNOSIS 626.0-626.9)		
876. DERANGEMENT AND DISPLACEMENT OF LUMBAR DISC	MEDICINE	17
(PRINCIPAL DIAGNOSIS 722.10, 32, 52, 73, 83, 93)		
883. ABDOMINAL PAIN	MEDICINE	2
(PRINCIPAL DIAGNOSIS 789.0)		
890. FRACTURE OF RADIUS OR ULNA	MEDICINE	2
(PRINCIPAL DIAGNOSIS 813)		
892. CONCUSSION	MEDICINE	4
(PRINCIPAL DIAGNOSIS 850)		
301. ALL PATIENTS, BASIC WORKUP	SURGERY	731
302. PATIENTS WITH ELEVATED ADM DIAS BP (EXC PREGNANCY)	SURGERY	13

**Quality Assurance Monitor
Priority For Investigation**

**SAMPLE HOSPITAL
IDS. CPHA**

QUALITY ASSURANCE MONITOR

CONTROL GROUP

U. S. NORTH CENTRAL REGION
PATIENTS: 4,621,152
HOSPITALS: 642
TIME PERIOD: JAN-DEC 79

The content of this report is based on a comparison of the hospital performance measured in the Monitor Profile against the suggested standards, thresholds for investigation, and regional norms. (See the back of this report for definitions of these terms.)

The groups monitored in QAM are presented in two lists:

1. "QAM GROUPS WITH NO MATERIAL DEVIATIONS"

These are the patient groups in which hospital performance for each criterion either met the suggested standard or was above the threshold for investigation. These groups are listed separately because further investigation into the care of these patients may be considered of low priority relative to those in groups where material deviations occur.

2. "HIGHEST (or SECOND, THIRD, or FOURTH) PRIORITY FOR INVESTIGATION"

QAM groups with material deviations (hospital performance for at least one criterion is below the threshold) are analyzed by a statistical method which takes into account the nature of the criterion, the degree of the deviation, and the proportion of criteria with material deviations.

For more explanation of how the suggested priorities are determined, refer to the back of this report

Pf

©NIA Form W-1-8-10 Copyright 1978 by Commission on Professional and Hospital Activities, Ann Arbor, Michigan. Printed in U.S.A.

HIGHEST PRIORITY FOR INVESTIGATION (CONTINUED)		DEPARTMENT OF:
309.	PATIENTS GIVEN DIURETICS	SURGERY
7710.	MALIGNANT NEOPLASM OF LARGE INTESTINE (PRINCIPAL DIAGNOSIS 153)	SURGERY
7714.	MALIGNANT NEOPLASM OF BLADDER (PRINCIPAL DIAGNOSIS 188)	SURGERY
7731.	DIABETES MELLITUS, ADULT (PRINCIPAL DIAGNOSIS 250)	SURGERY
7765.	ACUTE MYOCARDIAL INFARCTION (PRINCIPAL DIAGNOSIS 410)	SURGERY
7770.	PULMONARY EMBOLISM AS ANY DIAGNOSIS, SURGICAL (ANY DIAGNOSIS 415.1)	SURGERY
7772.	HEART FAILURE (PRINCIPAL DIAGNOSIS 428)	SURGERY
827.	DIVERTICULAR DISEASE (PRINCIPAL DIAGNOSIS 562)	SURGERY
847.	UTERINE CALCULUS (PRINCIPAL DIAGNOSIS 592.1)	SURGERY
849.	BENIGN PROSTATIC HYPERTROPHY (PRINCIPAL DIAGNOSIS 600)	SURGERY
876.	DERANGEMENT AND DISPLACEMENT OF LUMBAR DISC (PRINCIPAL DIAGNOSIS 722.10, 32, 52, 73, 83, 93)	SURGERY
891.	FRACTURE OF UPPER END OF FEMUR (PRINCIPAL DIAGNOSIS 820)	SURGERY
892.	CONCUSSION (PRINCIPAL DIAGNOSIS 850)	SURGERY
901.	ALL PATIENTS WITH OPERATIONS	OPERATED
920.	TOOTH EXTRACTION (ANY PROCEDURE 23.0-23.1)	OPERATED
931.	CARDIAC CATHETERIZATION (ANY PROCEDURE 37.21-37.23)	OPERATED
961.	ABDOMINAL HYSTERECTOMY (ANY PROCEDURE 68.3-68.4)	OPERATED
962.	VAGINAL HYSTERECTOMY (ANY PROCEDURE 68.5)	OPERATED
963.	D&C, ASPIRATION EXCEPT TO TERMINATE PREGNANCY (ANY PROCEDURE 69.02, 69.09, 69.52, OR 69.59)	OPERATED
971.	CLOSED, OPEN FRACTURE REDUCTION (EXC MAXILLOFACIAL) (ANY PROCEDURE 79.0-79.5)	OPERATED
982.	LOCAL EXCISION OF SKIN LESION (ANY PROCEDURE 86.21-86.3)	OPERATED

Quality Assurance Monitor Priority For Investigation

**SAMPLE HOSPITAL
IDS. CPHA**

PAS
Professional Activity Study

Page 4

三

0026
JUL-SEP 80

ALL HOSPITAL SUMMARY

QUALITY ASSURANCE MONITOR

CONTROL GROUP

PATIENTS:	4,621,152
HOSPITALS:	642
TIME PERIOD:	JAN-DEC 79

The content of this report is based on a comparison of the hospital performance measured in the Monitor Profile against the suggested standards, thresholds for investigation, and regional norms. (See the back of this report for definitions of these terms.)

The groups monitored in QAM are presented in two lists:

1. "QAM GROUPS WITH NO MATERIAL DEVIATIONS"

These are the patient groups in which hospital performance for each criterion either met the suggested standard or was above the threshold for investigation. These groups are listed separately because further investigation into the care of these patients may be considered of low priority relative to those in groups where material deviations occur.

2. "HIGHEST (or SECOND, THIRD, or FOURTH) PRIORITY FOR INVESTIGATION"

QAM groups with maternal deviations (hospital performance for at least one criterion is below the threshold) are analyzed by a statistical method which takes into account the nature of the criterion, the degree of the deviation, and the proportion of criteria with maternal deviations.

For more explanation of how the suggested priorities are determined, refer to the back of this report.

pf

DATE PREPARED:

MAY 22, 1982

TIME PERIOD:

JUL - SEP 1980

Page	
80	ALL HOSPITAL SUMMARY

444

SECOND PRIORITY FOR INVESTIGATION

QAM Group

Total Patients

103. PATIENTS WITH ADMISSION HGB<10 GM% (HCT<30%)

104. PATIENTS WITH ABNORMAL BLOOD SUGAR

106. PATIENTS WITH URINE POSITIVE FOR SUGAR

801. ACUTE BRONCHITIS, PEDIATRIC
(PRINCIPAL DIAGNOSIS 466)

807. ASTHMA, PEDIATRIC
(PRINCIPAL DIAGNOSIS 493)

875. RHEUMATOID ARTHRITIS
(PRINCIPAL DIAGNOSIS 714)

883. ABDOMINAL PAIN
(PRINCIPAL DIAGNOSIS 789.0)

203. PATIENTS WITH ADMISSION HGB<10 GM% (HCT<30%)

746. ALCOHOL DEPENDENCE SYNDROME AS ANY DIAGNOSIS
(ANY DIAGNOSIS 303)

763. ESSENTIAL HYPERTENSION
(PRINCIPAL DIAGNOSIS 401)

771. ARRHYTHMIA AND SLOWED CONDUCTION
(PRINCIPAL DIAGNOSIS 426-427)

802. ACUTE BRONCHITIS, ADULT
(PRINCIPAL DIAGNOSIS 466)

804. PNEUMONIA, ADULT
(PRINCIPAL DIAGNOSIS 480-486)

806. EMPHYSEMA AND OTHER COPD
(PRINCIPAL DIAGNOSIS 492,494-496)

808. ASTHMA, ADULT
(PRINCIPAL DIAGNOSIS 493)

825. GASTRIC ULCER, UNCOMPLICATED
(PRINCIPAL DIAGNOSIS 531.30,531.70 OR 531.90)

827. DIVERTICULAR DISEASE
(PRINCIPAL DIAGNOSIS 562)

882. CHEST PAIN
(PRINCIPAL DIAGNOSIS 786.5)

303. PATIENTS WITH ADMISSION HGB<10 GM% (HCT<30%)

310. PATIENTS WITH OTHER DRUG THERAPY
ALCOHOL DEPENDENCE SYNDROME AS ANY DIAGNOSIS
(ANY DIAGNOSIS 303)

763. ESSENTIAL HYPERTENSION
(PRINCIPAL DIAGNOSIS 401)

766. ANGINA PECTORIS
(PRINCIPAL DIAGNOSIS 413)

771. ARRHYTHMIA AND SLOWED CONDUCTION
(PRINCIPAL DIAGNOSIS 426-427)

773. CEREBROVASCULAR DISEASE
(PRINCIPAL DIAGNOSIS 430-436)

775. PHLEBITIS AND THROMBOPHLEBITIS
(PRINCIPAL DIAGNOSIS 451)

CPIA

Quality Assurance Monitor Priority For Investigation

SAMPLE HOSPITAL
IDS, CPHA

QUALITY ASSURANCE MONITOR

CONTROL GROUP

U.S. NORTH CENTRAL REGION
HOSPITALS:
4,621,152
TIME PERIOD: 642
-JAN-DEC-79

The content of this report is based on a comparison of the hospital performance measured in the Monitor Profile against the suggested standards, thresholds for investigation, and regional norms. (See the back of this report for definitions of these terms.)

The groups monitored in QAM are presented in two lists:

1. "QAM GROUPS WITH NO MATERIAL DEVIATIONS"

These are the patient groups in which hospital performance for each criterion either met the suggested standard or was above the threshold for investigation. These groups are listed separately because further investigation into the care of these patients may be considered of low priority relative to those in groups where material deviations occur.

2. "HIGHEST (or SECOND, THIRD, or FOURTH) PRIORITY FOR INVESTIGATION"

QAM groups with material deviations (hospital performance for at least one criterion is below the threshold) are analyzed by a statistical method which takes into account the nature of the criterion, the degree of the deviation, and the proportion of criteria with material deviations

For more explanation of how the suggested priorities are determined, refer to the back of this report

PAS
Professional Activity Study

Page

5 **

0028
JUL-SEP 80

ALL HOSPITAL SUMMARY

QAM Group

Total
Patients
2

SECOND PRIORITY FOR INVESTIGATION (CONTINUED) DEPARTMENT OF:

776.	VARICOSE VEINS OF LEG (PRINCIPAL DIAGNOSIS 454)	SURGERY	3
804.	PNEUMONIA, ADULT (PRINCIPAL DIAGNOSIS 480-486)	SURGERY	5
806.	EMPHYSEMA AND OTHER COPD (PRINCIPAL DIAGNOSIS 492,494-496)	SURGERY	3
825.	GASTRIC ULCER, UNCOMPLICATED (PRINCIPAL DIAGNOSIS 531.30,531.70 OR 531.90)	SURGERY	1
848.	CYSTITIS (PRINCIPAL DIAGNOSIS 595)	SURGERY	3
862.	CHEST PAIN (PRINCIPAL DIAGNOSIS 786.5)	SURGERY	2
883.	ABDOMINAL PAIN (PRINCIPAL DIAGNOSIS 789.0)	SURGERY	1
401.	A. ALL OBSTETRICS PATIENTS, BASIC WORKUP	OB-GYN	161
401.	B. ALL GYNECOLOGY PATIENTS, BASIC WORKUP	OB-GYN	127
404.	PATIENTS WITH ABNORMAL BLOOD SUGAR	OB-GYN	18
408.	PATIENTS GIVEN ANTIBIOTICS	OB-GYN	54
806.	EMPHYSEMA AND OTHER COPD (PRINCIPAL DIAGNOSIS 492,494-496)	OB-GYN	1
850.	DISORDERS OF MENSTRUATION (PRINCIPAL DIAGNOSIS 626.0-626.9)	OB-GYN	22
860.	ABORTION AS ANY DIAGNOSIS (ANY DIAGNOSIS 634-637)	OB-GYN	10
861.	DELIVERY AS ANY DIAGNOSIS (ANY DIAG 641-676,5TH DIGIT 0,1,2 WHERE APPLIC)	OB-GYN	124
501.	ALL LIVEBORN AND STILLBORN	NEWBORN	123
912.	LENS EXTRACTION (ANY PROCEDURE 13.1-13.6)	OPERATED	16
921.	TONSILLECTOMY AND ADENOIDECTOMY (ANY PROCEDURE 28.2,28.3, OR 28.6)	OPERATED	77
937.	PRIMARY APPENDECTOMY (PRINCIPAL PROCEDURE 47.0)	OPERATED	15
955.	PROSTATECTOMY (ANY PROCEDURE 60.2-60.6)	OPERATED	9

THIRD PRIORITY FOR INVESTIGATION

006.	PATIENTS WITH URINE POSITIVE FOR SUGAR	HOSPITALWIDE	92
007.	PATIENTS GIVEN ANTICOAGULANTS	HOSPITALWIDE	82
009.	PATIENTS GIVEN DIURETICS	HOSPITALWIDE	436
010.	PATIENTS WITH OTHER DRUG THERAPY	HOSPITALWIDE	500
101.	ALL PATIENTS, BASIC WORKUP	PEDIATRIC MEDICINE	311

DATE PREPARED:

MAY 22, 1982

TIME PERIOD:

JUL-SEP 1980

Page

5 **

PFI

CPHA

Quality Assurance Monitor Priority For Investigation

SAMPLE HOSPITAL
IDS, CPHA

QUALITY ASSURANCE MONITOR

CONTROL GROUP

U.S. NORTH CENTRAL REGION
PATIENTS: 4,621,152
HOSPITALS: 642
TIME PERIOD: JAN-DEC 79

The content of this report is based on a comparison of the hospital performance measured in the Monitor Profile against the suggested standards, thresholds for investigation, and regional norms. (See the back of this report for definitions of these terms.)

The groups monitored in QAM are presented in two lists:

1. "QAM GROUPS WITH NO MATERIAL DEVIATIONS"

These are the patient groups in which hospital performance for each criterion either met the suggested standard or was above the threshold for investigation. These groups are listed separately because further investigation into the care of these patients may be considered of low priority relative to those in groups where material deviations occur.

2. "HIGHEST (or SECOND, THIRD, or FOURTH) PRIORITY FOR INVESTIGATION"

QAM groups with material deviations (hospital performance for at least one criterion is below the threshold) are analyzed by a statistical method which takes into account the nature of the criterion, the degree of the deviation, and the proportion of criteria with material deviations.

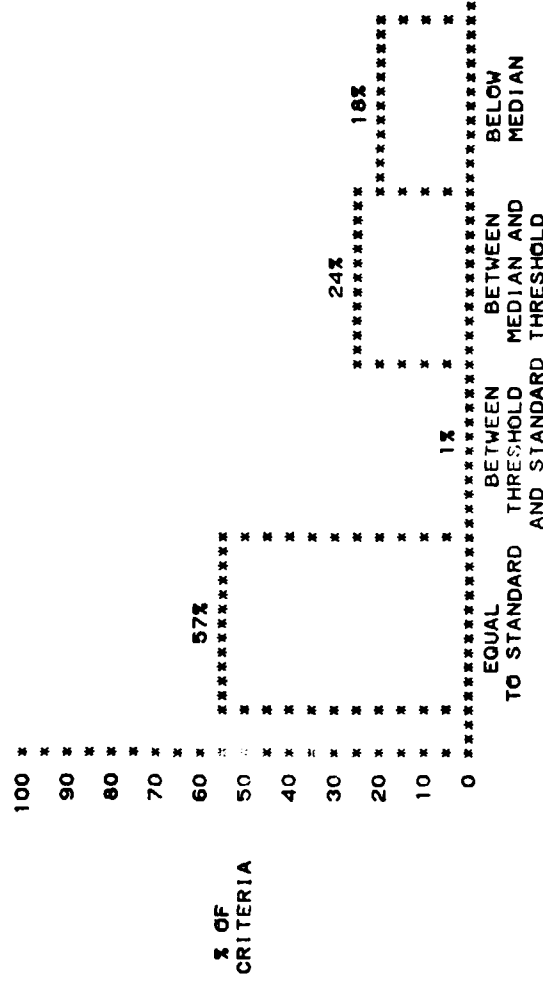
For more explanation of how the suggested priorities are determined, refer to the back of this report

ALL HOSPITAL SUMMARY

QAM Group

Total
Patients
-2-

PERFORMANCE SUMMARY



HOSPITAL PERFORMANCE *

* YOUR PERFORMANCE FOR 1156 CRITERIA WAS USED FOR THIS GRAPH.
SEE THE BACK OF THIS REPORT FOR DEFINITIONS OF STANDARD, THRESHOLD, AND MEDIAN.

Quality Assurance Monitor Priority For Investigation

SAMPLE HOSPITAL
IDS, CPHA

QUALITY ASSURANCE MONITOR

CONTROL GROUP

U.S. NORTH CENTRAL REGION
PATIENTS 4,621,152
HOSPITALS 642
TIME PERIOD JAN-DEC 79

The content of this report is based on a comparison of the hospital performance measured in the Monitor Profile against the suggested standards, thresholds for investigation, and regional norms. (See the back of this report for definitions of these terms.)

The groups monitored in QAM are presented in two lists:

1. "QAM GROUPS WITH NO MATERIAL DEVIATIONS"

These are the patient groups in which hospital performance for each criterion either met the suggested standard or was above the threshold for investigation. These groups are listed separately because further investigation into the care of these patients may be considered of low priority relative to those in groups where material deviations occur.

2. "HIGHEST (or SECOND, THIRD, or FOURTH) PRIORITY FOR INVESTIGATION"

QAM groups with material deviations (hospital performance for at least one criterion is below the threshold) are analyzed by a statistical method which takes into account the nature of the criterion, the degree of the deviation, and the proportion of criteria with material deviations.

For more explanation of how the suggested priorities are determined, refer to the back of this report.

PAS

Professional Activity Study

Page

1 **

0026
JUL-SEP 80

ALL HOSPITAL SUMMARY

QAM Group

Total
Patients
2

NO MATERIAL DEVIATIONS

764. HYPERTENSIVE HEART DISEASE (PRINCIPAL DIAGNOSIS 402)	MEDICINE	2
713. MALIGNANT NEOPLASM OF PROSTATE (PRINCIPAL DIAGNOSIS 185)	SURGERY	1
828. CIRRHOSIS (PRINCIPAL DIAGNOSIS 571)	SURGERY	2
890. FRACTURE OF RADIUS OR ULNA (PRINCIPAL DIAGNOSIS 813)	SURGERY	2
402. PATIENTS WITH ELEVATED ADM DIAS BP (EXC PREGNANCY)	OB-GYN	1
862. BREECH PRESENTATION, DELIVERED AS ANY DIAGNOSIS (ANY DIAGNOSIS 652.2, 669.6 WITH 5TH DIGIT 0, 1 OR 2)	OB-GYN	4

DEPARTMENT OF:

MEDICINE

SURGERY

SURGERY

SURGERY

OB-GYN

OB-GYN

Quality Assurance Monitor Priority For Investigation

SAMPLE HOSPITAL
IDS, CPHA

QUALITY ASSURANCE MONITOR

CONTROL GROUP

U.S. NORTH CENTRAL REGION
PATIENTS 4,621,152
HOSPITALS 642
TIME PERIOD JAN-DEC 79

The content of this report is based on a comparison of the hospital performance measured in the Monitor Profile against the suggested standards, thresholds for investigation, and regional norms (See the back of this report for definitions of these terms)

The groups monitored in QAM are presented in two lists.

1. "QAM GROUPS WITH NO MATERIAL DEVIATIONS"

98

These are the patient groups in which hospital performance for each criterion either met the suggested standard or was above the threshold for investigation. These groups are listed separately because further investigation into the care of these patients may be considered of low priority relative to those in groups where material deviations occur

2. "GHEST (or SECOND, THIRD, or FOURTH) PRIORITY FOR INVESTIGATION"

QAM groups with material deviations (hospital performance for at least one criterion is below the threshold) are analyzed by a statistical method which takes into account the nature of the criterion, the degree of the deviation, and the proportion of criteria with material deviations

For more explanation of how the suggested priorities are determined, refer to the back of this report

PAS

Professional Activity Study

Page

2 **

0026

JUL-SEP 80

Total
Patients

2

ALL HOSPITAL SUMMARY

QAM Group

HIGHEST PRIORITY FOR INVESTIGATION		DEPARTMENT OF:	
001. ALL PATIENTS, BASIC WORKUP		HOSPITALWIDE	1
002. PATIENTS WITH ELEVATED ADM DIAS BP (EXC PREGNANCY)		HOSPITALWIDE	2,211
108. PATIENTS GIVEN ANTIBIOTICS		PEDIATRIC MEDICINE	29
109. PATIENTS GIVEN DIURETICS		PEDIATRIC MEDICINE	92
892. CONCUSSION		PEDIATRIC MEDICINE	14
(PRINCIPAL DIAGNOSIS 850)			12
201. ALL PATIENTS, BASIC WORKUP		MEDICINE	881
202. PATIENTS WITH ELEVATED ADM DIAS BP (EXC PREGNANCY)		MEDICINE	15
206. PATIENTS WITH URINE POSITIVE FOR SUGAR		MEDICINE	52
711. MALIGNANT NEOPLASM OF LUNG, BRONCHUS, TRACHEA		MEDICINE	4
(PRINCIPAL DIAGNOSIS 162)			1
712. MALIGNANT NEOPLASM OF BREAST		MEDICINE	1
(PRINCIPAL DIAGNOSIS 174-175)			1
716. UTERINE LEIOMYOMA		MEDICINE	1
(PRINCIPAL DIAGNOSIS 218)			1
731. DIABETES MELLITUS, ADULT		MEDICINE	35
(PRINCIPAL DIAGNOSIS 250)			6
735. ANEMIA		MEDICINE	6
(PRINCIPAL DIAGNOSIS 280-285)			20
765. ACUTE MYOCARDIAL INFARCTION		MEDICINE	28
(PRINCIPAL DIAGNOSIS 410)			5
773. CEREBROVASCULAR DISEASE		MEDICINE	2
(PRINCIPAL DIAGNOSIS 430-438)			6
775. PHLEBITIS AND THROMBOPHLEBITIS		MEDICINE	3
(PRINCIPAL DIAGNOSIS 451)			2
776. VARICOSE VEINS OF LEG		MEDICINE	2
(PRINCIPAL DIAGNOSIS 454)			3
828. CIRRHOSIS		MEDICINE	2
(PRINCIPAL DIAGNOSIS 571)			3
847. URETERAL CALCULUS		MEDICINE	3
(PRINCIPAL DIAGNOSIS 592.1)			2
849. BENIGN PROSTATIC HYPERTROPHY		MEDICINE	17
(PRINCIPAL DIAGNOSIS 600)			2
850. DISORDERS OF MENSTRUATION		MEDICINE	2
(PRINCIPAL DIAGNOSIS 626.0-626.9)			4
876. DERANGEMENT AND DISPLACEMENT OF LUMBAR DISC		MEDICINE	2
(PRINCIPAL DIAGNOSIS 722.10, 32, 52, 73, 83, 93)			4
883. ABDOMINAL PAIN		MEDICINE	4
(PRINCIPAL DIAGNOSIS 789.0)			4
890. FRACTURE OF RADIUS OR ULNA		MEDICINE	731
(PRINCIPAL DIAGNOSIS 813)			13
892. CONCUSSION		MEDICINE	4
(PRINCIPAL DIAGNOSIS 850)			4
301. ALL PATIENTS, BASIC WORKUP		SURGERY	46
302. PATIENTS WITH ELEVATED ADM DIAS BP (EXC PREGNANCY)		SURGERY	13

DATE PREPARED

MAY 22, 1982

TIME PERIOD

JUL-SEP 1980

Page

ALL HOSPITAL SUMMARY

2 **

CPHA

Quality Assurance Monitor Priority For Investigation

SAMPLE HOSPITAL
IDS, CPHA

QUALITY ASSURANCE MONITOR

CONTROL GROUP

U.S. NORTH CENTRAL REGION
PATIENTS 4,621,152
HOSPITALS 642
TIME PERIOD JAN-DEC 79

The content of this report is based on a comparison of the hospital performance measured in the Monitor Profile against the suggested standards, thresholds for investigation, and regional norms. (See the back of this report for definitions of these terms.)

The groups monitored in QAM are presented in two lists

1. "QAM GROUPS WITH NO MATERIAL DEVIATIONS"

These are the patient groups in which hospital performance for each criterion either met the suggested standard or was above the threshold for investigation. These groups are listed separately because further investigation into the care of these patients may be considered of low priority relative to those in groups where material deviations occur.

2. "HIGHEST (or SECOND, THIRD, or FOURTH) PRIORITY FOR INVESTIGATION"

QAM groups with material deviations (hospital performance for at least one criterion is below the threshold) are analyzed by a statistical method which takes into account the nature of the criterion, the degree of the deviation, and the proportion of criteria with material deviations

For more explanation of how the suggested priorities are determined, refer to the back of this report

PFI

DATE PREPARED

MAY 22, 1982

TIME PERIOD

JUL-SEP 1980

ALL HOSPITAL SUMMARY

Page 3

PAS

Professional Activity Study

Page

3 **

0026
JUL-SEP 80Total
Patients

2

HIGHEST PRIORITY FOR INVESTIGATION (CONTINUED) DEPARTMENT OF:

309.	PATIENTS GIVEN DIURETICS	SURGERY	178
710.	MALIGNANT NEOPLASM OF LARGE INTESTINE (PRINCIPAL DIAGNOSIS 153)	SURGERY	5
714.	MALIGNANT NEOPLASM OF BLADDER (PRINCIPAL DIAGNOSIS 188)	SURGERY	1
731.	DIABETES MELLITUS, ADULT (PRINCIPAL DIAGNOSIS 250)	SURGERY	4
765.	ACUTE MYOCARDIAL INFARCTION (PRINCIPAL DIAGNOSIS 410)	SURGERY	4
770.	PULMONARY EMBOLISM AS ANY DIAGNOSIS, SURGICAL (ANY DIAGNOSIS 415.1)	SURGERY	2
772.	HEART FAILURE (PRINCIPAL DIAGNOSIS 428)	SURGERY	5
827.	DIVERTICULAR DISEASE (PRINCIPAL DIAGNOSIS 562)	SURGERY	1
847.	URETERAL CALCULUS (PRINCIPAL DIAGNOSIS 592.1)	SURGERY	5
849.	BENIGN PROSTATIC HYPERTROPHY (PRINCIPAL DIAGNOSIS 600)	SURGERY	6
876.	DERANGEMENT AND DISPLACEMENT OF LUMBAR DISC (PRINCIPAL DIAGNOSIS 722.10, 32, 52, 73, 83, 93)	SURGERY	35
891.	FRACTURE OF UPPER END OF FEMUR (PRINCIPAL DIAGNOSIS 820)	SURGERY	14
892.	CONCUSSION (PRINCIPAL DIAGNOSIS 850)	SURGERY	2
901.	ALL PATIENTS WITH OPERATIONS	OPERATED	1,106
920.	TOOTH EXTRACTION (ANY PROCEDURE 23.0-23.1)	OPERATED	10
931.	CARDIAC CATHETERIZATION (ANY PROCEDURE 37.21-37.23)	OPERATED	12
961.	ABDOMINAL HYSTERECTOMY (ANY PROCEDURE 68.3-68.4)	OPERATED	27
962.	VAGINAL HYSTERECTOMY (ANY PROCEDURE 68.5)	OPERATED	13
963.	D&C, ASPIRATION EXCEPT TO TERMINATE PREGNANCY (ANY PROCEDURE 69.02, 69.09, 69.52, OR 69.59)	OPERATED	69
971.	CLOSED, OPEN FRACTURE REDUCTION (EXC MAXILLOFACIAL) (ANY PROCEDURE 79.0-79.5)	OPERATED	29
982.	LOCAL EXCISION OF SKIN LESION (ANY PROCEDURE 86.21-86.3)	OPERATED	42

Quality Assurance Monitor Priority For Investigation

SAMPLE HOSPITAL
105, CPA

PAS
Professional Activity Study
Page 4 ** 0026
JUL-SEP 80

QUALITY ASSURANCE MONITOR

CONTROL GROUP

ATIENTS 4,621,152
HOSPITALS 642
TIME PERIOD JAN-DEC 79

The content of this report is based on a comparison of the hospital performance measured in the Monitor Profile against the suggested standards, thresholds for investigation, and regional norms (See the back of this report for definitions of these terms)

The groups monitored in QAM are presented in two lists

1. "QAM GROUPS WITH NO MATERIAL DEVIATIONS"

These are the patient groups in which hospital performance for each criterion either met the suggested standard or was above the threshold for investigation. These groups are listed separately because further investigation into the care of these patients may be considered of low priority relative to those in groups where material deviations occur

2. "HIGHEST (or SECOND, THIRD, or FOURTH) PRIORITY FOR INVESTIGATION"

QAM groups with material deviations (hospital performance for at least one criterion is below the threshold) are analyzed by a statistical method which takes into account the nature of the criterion, the degree of the deviation, and the proportion of criteria with material deviations.

For more explanation of how the suggested priorities are determined refer to the back of this report

ALL HOSPITAL SUMMARY

QAM Group

SECOND PRIORITY FOR INVESTIGATION

103. PATIENTS WITH ADMISSION HGB<10 GM% (HCT<30%)	PEDIATRIC MEDICINE	1
104. PATIENTS WITH ABNORMAL BLOOD SUGAR	PEDIATRIC MEDICINE	15
106. PATIENTS WITH URINE POSITIVE FOR SUGAR	PEDIATRIC MEDICINE	6
801. ACUTE BRONCHITIS, PEDIATRIC (PRINCIPAL DIAGNOSIS 466)	PEDIATRIC MEDICINE	10
807. ASTHMA, PEDIATRIC (PRINCIPAL DIAGNOSIS 493)	PEDIATRIC MEDICINE	10
875. RHEUMATOID ARTHRITIS (PRINCIPAL DIAGNOSIS 714)	PEDIATRIC MEDICINE	1
883. ABDOMINAL PAIN (PRINCIPAL DIAGNOSIS 789.0)	PEDIATRIC MEDICINE	2
203. PATIENTS WITH ADMISSION HGB<10 GM% (HCT<30%)	MEDICINE	24
746. ALCOHOL DEPENDENCE SYNDROME AS ANY DIAGNOSIS (ANY DIAGNOSIS 303)	MEDICINE	7
763. ESSENTIAL HYPERTENSION (PRINCIPAL DIAGNOSIS 401)	MEDICINE	1
771. ARRHYTHMIA AND SLOWED CONDUCTION (PRINCIPAL DIAGNOSIS 426-427)	MEDICINE	25
802. ACUTE BRONCHITIS, ADULT (PRINCIPAL DIAGNOSIS 466)	MEDICINE	7
804. PNEUMONIA, ADULT (PRINCIPAL DIAGNOSIS 480-486)	MEDICINE	21
806. EMPHYSEMA AND OTHER COPD (PRINCIPAL DIAGNOSIS 492, 494-496)	MEDICINE	16
808. ASTHMA, ADULT (PRINCIPAL DIAGNOSIS 493)	MEDICINE	25
825. GASTRIC ULCER, UNCOMPLICATED (PRINCIPAL DIAGNOSIS 531.30, 531.70 OR 531.90)	MEDICINE	6
827. DIVERTICULAR DISEASE (PRINCIPAL DIAGNOSIS 562)	MEDICINE	7
882. CHEST PAIN (PRINCIPAL DIAGNOSIS 786.5)	MEDICINE	10
303. PATIENTS WITH ADMISSION HGB<10 GM% (HCT<30%)	SURGERY	18
310. PATIENTS WITH OTHER DRUG THERAPY	SURGERY	165
746. ALCOHOL DEPENDENCE SYNDROME AS ANY DIAGNOSIS (ANY DIAGNOSIS 303)	SURGERY	2
763. ESSENTIAL HYPERTENSION (PRINCIPAL DIAGNOSIS 401)	SURGERY	2
766. ANGINA PECTORIS (PRINCIPAL DIAGNOSIS 413)	SURGERY	9
771. ARRHYTHMIA AND SLOWED CONDUCTION (PRINCIPAL DIAGNOSIS 426-427)	SURGERY	4
773. CEREBROVASCULAR DISEASE (PRINCIPAL DIAGNOSIS 430-438)	SURGERY	8
775. PHLEBITIS AND THROMBOPHLEBITIS (PRINCIPAL DIAGNOSIS 451)	SURGERY	3

Priority For Investigation

**SAMPLE HOSPITAL
INDS CPHA**

QUALITY ASSURANCE MONITOR

CONTROL GROUP

U.S. NORTH CENTRAL REGION
PATIENTS 4,621,152
HOSPITALS 642
TIME PERIOD JAN-DEC 79

The content of this report is based on a comparison of the hospital performance measured in the Monitor Profile against the suggested standards, thresholds for investigation, and regional norms. (See the back of this report for definitions of these terms.)

The groups monitored in QAM are presented in two lists

1. "QAM GROUPS WITH NO MATERIAL DEVIATIONS"

These are the patient groups in which hospital performance for each criterion either met the suggested standard or was above the threshold for investigation. These groups are listed separately because further investigation into the care of these patients may be considered of low priority relative to those in groups where major deviations occur.

2. "HIGHEST (or SECOND, THIRD, or FOURTH) PRIORITY FOR INVESTIGATION"

QAM groups with material deviations (hospital performance for at least one criterion is below the threshold) are analyzed by a statistical method which takes into account the nature of the criterion, the degree of the deviation, and the proportion of criteria with material deviations.

For more explanation of how the suggested priorities are determined, refer to the back of this report.

Pf1

© 1988 by the American Psychological Association. Copyright 1978 by Commission on Professional and Hospital Activities. Ann Arbor, Michigan. Printed in U.S.A.

Professional Activity Study

Page

5 **
002E
JUL-SEP 80

ALL HOSPITAL SUMMARY

QAM Group

Total
tients
2.

SECOND PRIORITY FOR INVESTIGATION (CONTINUED)

DEPARTMENT OF :			
776.	VARICOSE VEIN'S OF LEG (PRINCIPAL DIAGNOSIS 454)		3 SURGERY
804.	PNEUMONIA, ADULT (PRINCIPAL DIAGNOSIS 480-486)		5 SURGERY
806.	EMPHYSEMA AN.) OTHER COPD (PRINCIPAL DIAGNOSIS 492, 494-496)		3 SURGERY
825.	GASTRIC ULCER, UNCOMPLICATED (PRINCIPAL DIAGNOSIS 531.30, 531.70 OR 531.90)		1 SURGERY
848.	CYSTITIS (PRINCIPAL DIAGNOSIS 595)		3 SURGERY
882.	CHEST PAIN (PRINCIPAL DIAGNOSIS 786.5)		2 SURGERY
883.	ABDOMINAL PAIN (PRINCIPAL DIAGNOSIS 789.0)		1 SURGERY
401.	A. ALL OBSTETRICS PATIENTS, BASIC WORKUP		161 OB-GYN
401.	B. ALL GYNECOLOGY PATIENTS, BASIC WORKUP		127 OB-GYN
404.	PATIENTS WITH ABNORMAL BLOOD SUGAR		18 OB-GYN
408.	PATIENTS GIVEN ANTIBIOTICS		54 OB-GYN
806.	EMPHYSEMA AND OTHER COPD (PRINCIPAL DIAGNOSIS 492, 494-496)		1 OB-GYN
850.	DISORDERS OF MENSTRUATION (PRINCIPAL DIAGNOSIS 626.0-626.9)		22 OB-GYN
860.	ABORTION AS ANY DIAGNOSIS (ANY DIAGNOSIS 634-637)		10 OB-GYN
861.	DELIVERY AS ANY DIAGNOSIS (ANY DIAG 641-676, 5TH DIGIT 0, 1, 2 WHERE APPLIC)		124 OB-GYN
901.	ALL LIVEBORN AND STILLBORN		123 NEWBORN
912.	LENS EXTRACTION (ANY PROCEDURE 13.1-13.6)		16 OPERATED
921.	TONSILLECTOMY AND ADENOIDECTOMY (ANY PROCEDURE 28.2, 28.3, OR 28.6)		77 OPERATED
937.	PRIMARY APPENDECTOMY (PRINCIPAL PROCEDURE 47.0)		15 OPERATED
955.	PROSTATECTOMY		9 OPERATED

[illegible]

THIRD PRIORITY FOR INVESTIGATION

006. PATIENTS WITH URINE POSITIVE FOR SUGAR	HOSPITALWIDE	92
007. PATIENTS GIVEN ANTICOAGULANTS	HOSPITALWIDE	82
009. PATIENTS GIVEN DIURETICS	HOSPITALWIDE	436
010. PATIENTS WITH OTHER DRUG THERAPY	HOSPITALWIDE	500
001. ALL PATIENTS BASIC WORKUP	PEDIATRIC MEDICINE	311

DATE PREPARED	TIME PERIOD	Page
MAY 22, 1982	JUL-SEP 1980	ALL HOSPITAL SUMMARY

三

CPHA

Quality Assurance Monitor Priority For Investigation

SAMPLE HOSPITAL
IDS, CPHA

QUALITY ASSURANCE MONITOR

CONTROL GROUP

U.S. NORTH CENTRAL REGION
PATIENTS 4,621,152
HOSPITALS 642
TIME PERIOD JAN-DEC 79

The content of this report is based on a comparison of the hospital performance measured in the Monitor Profile against the suggested standards, thresholds for investigation, and regional norms. (See the back of this report for definitions of these terms.)

The groups monitored in QAM are presented in two lists

1. "QAM GROUPS WITH NO MATERIAL DEVIATIONS"

These are the patient groups in which hospital performance for each criterion either met the suggested standard or was above the threshold for investigation. These groups are listed separately because further investigation into the care of these patients may be considered of low priority relative to those in groups where material deviations occur.

2. "HIGHEST (or SECOND, THIRD, or FOURTH) PRIORITY FOR INVESTIGATION"

QAM groups with material deviations (hospital performance for at least one criterion is below the threshold) are analyzed by a statistical method which takes into account the nature of the criterion, the degree of the deviation, and the proportion of criteria with material deviations.

For more explanation of how the suggested priorities are determined, refer to the back of this report

PAS
Professional Activity Study
Page 6 **
002
JUL-SEP 80
Total
Patients
2

ALL HOSPITAL SUMMARY

QAM Group

THIRD PRIORITY FOR INVESTIGATION (CONTINUED)			DEPARTMENT OF:	
755.	CONVULSIVE DISORDERS, PEDIATRIC (PRINCIPAL DIAGNOSIS 345 OR 780.3)		PEDIATRIC MEDICINE	1
757.	CHRONIC OTITIS MEDIA (PRINCIPAL DIAGNOSIS 381.1-381.4, 382.1-382.9)		PEDIATRIC MEDICINE	11
803.	PNEUMONIA, PEDIATRIC (PRINCIPAL DIAGNOSIS 480-486)		PEDIATRIC MEDICINE	17
826.	NONGASTRIC PEPTIC ULCER (PRINCIPAL DIAGNOSIS 532-534 WITH 30, 70, OR 90)		PEDIATRIC MEDICINE	1
207.	PATIENTS GIVEN ANTICOAGULANTS		MEDICINE	22
209.	PATIENTS GIVEN DIURETICS		MEDICINE	236
210.	PATIENTS WITH OTHER DRUG THERAPY		MEDICINE	308
211.	PATIENTS TRANSFUSED		MEDICINE	9
702.	INTESTINAL INFECTION DISEASE, ADULT (PRINCIPAL DIAGNOSIS 001-009)		MEDICINE	7
713.	MALIGNANT NEOPLASM OF PROSTATE (PRINCIPAL DIAGNOSIS 185)		MEDICINE	1
740.	ORGANIC BRAIN SYNDROME (PRINCIPAL DIAGNOSIS 290, 294, OR 310)		MEDICINE	2
745.	NEUROSES AND PERSONALITY DISORDERS (PRINCIPAL DIAGNOSIS 300-302, 308-309)		MEDICINE	5
756.	CONVULSIVE DISORDERS, ADULT (PRINCIPAL DIAGNOSIS 345 OR 780.3)		MEDICINE	11
766.	ANGINA PECTORIS (PRINCIPAL DIAGNOSIS 413)		MEDICINE	35
768.	MISCELLANEOUS ISCHEMIC HEART DISEASE (PRINCIPAL DIAGNOSIS 412 OR 414)		MEDICINE	10
769.	PULMONARY EMBOLISM AS ANY DIAGNOSIS, MEDICAL (ANY DIAGNOSIS 415.1)		MEDICINE	3
772.	HEART FAILURE (PRINCIPAL DIAGNOSIS 428)		MEDICINE	38
826.	NONGASTRIC PEPTIC ULCER (PRINCIPAL DIAGNOSIS 532-534 WITH 30, 70, OR 90)		MEDICINE	20
829.	DISEASE OF PANCREAS, MEDICAL (PRINCIPAL DIAGNOSIS 577)		MEDICINE	2
831.	GASTROINTESTINAL HEMORRHAGE (PRINCIPAL DIAGNOSIS 578)		MEDICINE	2
846.	RENAL CALCULUS (PRINCIPAL DIAGNOSIS 592.0)		MEDICINE	6
848.	CYSTITIS (PRINCIPAL DIAGNOSIS 595)		MEDICINE	2
875.	RHEUMATOID ARTHRITIS (PRINCIPAL DIAGNOSIS 714)		MEDICINE	3
881.	HEADACHE (PRINCIPAL DIAGNOSIS 784.0)		MEDICINE	7
307.	PATIENTS GIVEN ANTICOAGULANTS		SURGERY	54

Quality Assurance Monitor Priority For Investigation

SAMPLE HOSPITAL
IDS, CPHA

QUALITY ASSURANCE MONITOR

CONTROL GROUP

U.S. NORTH CENTRAL REGION
PATIENTS 4,621,152
HOSPITALS 642
TIME PERIOD JAN-DEC 79

The content of this report is based on a comparison of the hospital performance measured in the Monitor Profile against the suggested standard thresholds for investigation, and regression norms. (See the back of this report for definitions of these terms.)

The groups mentioned in QAM are presented in two lists

103 1. "QAM GROUPS WITH NO MATERIAL DEVIATIONS"

These are the patient groups in which hospital performance for each criterion either met the suggested standard or was above the threshold for investigation. These groups are listed separately because further investigation into the care of these patients may be considered of low priority relative to those in groups where material deviations occur.

2. "HIGHEST (or SECOND, THIRD, or FOURTH) PRIORITY FOR INVESTIGATION"

QAM groups with material deviations (hospital performance for at least one criterion is below the threshold) are analyzed by a statistical method which takes into account the nature of the criterion, the degree of the deviation, and the proportion of criteria with material deviations.

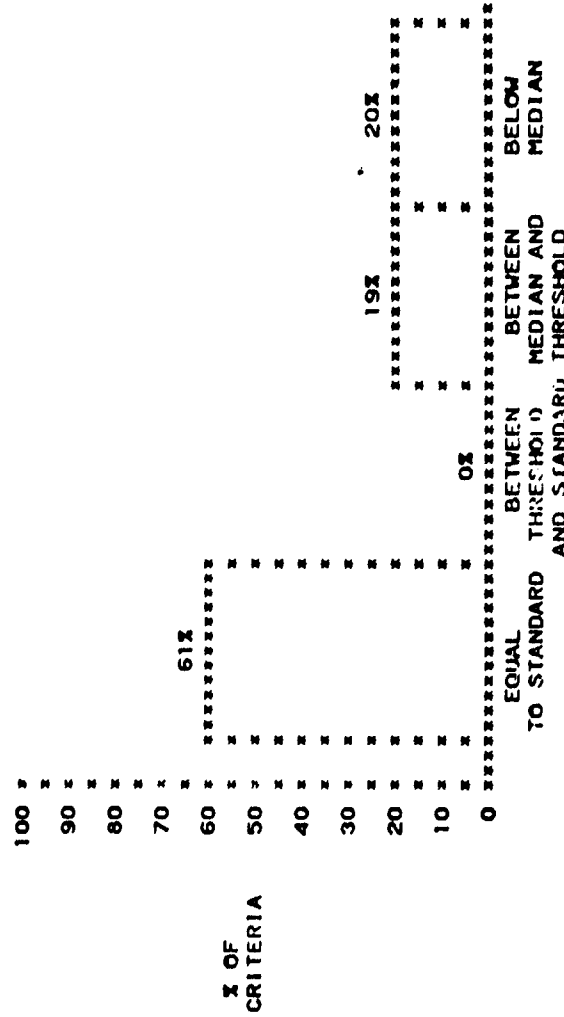
For more explanation of how the suggested priorities are determined, refer to the back of this report.

PAS
Professional Activity Study
Page 1 of 2
002
JUL-SEP 8
Total Patients 2

DEPT OF SURGERY

QAM Group

PERFORMANCE SUMMARY



HOSPITAL PERFORMANCE

* YOUR PERFORMANCE FOR 339 CRITERIA WAS USED FOR THIS GRAPH. SEE THE BACK OF THIS REPORT FOR DEFINITIONS OF STANDARD, THRESHOLD, AND MEDIAN.

Quality Assurance Monitor Priority For Investigation

SAMPLE HOSPITAL
IDS, CPHA

QUALITY ASSURANCE MONITOR

CONTROL GROUP

U.S. NORTH CENTRAL REGION
PATIENTS 4,621,152
HOSPITALS 642
TIME PERIOD JAN-DEC 79

The content of this report is based on a comparison of the hospital performance measured in the Monitor Profile against the suggested standards, thresholds for investigation, and regional norms. (See the back of this report for definitions of these terms.)

The groups monitored in QAM are presented in two lists:

1. "QAM GROUPS WITH NO MATERIAL DEVIATIONS"

These are the patient groups in which hospital performance for each criterion either met the suggested standard or was above the threshold for investigation. These groups are listed separately because further investigation into the care of these patients may be considered of low priority relative to those in groups where material deviations occur.

2. "HIGHEST (or SECOND, THIRD, or FOURTH) PRIORITY FOR INVESTIGATION"

QAM groups with material deviations (hospital performance for at least one criterion is below the threshold) are analyzed by a statistical method which takes into account the nature of the criterion, the degree of the deviation, and the proportion of criteria with material deviations.

For more explanation of how the suggested priorities are determined refer to the back of this report.

PAS

Page 1

Page 1

DEPT OF SURGERY

QAM Group

Total
Patients 2

NO MATERIAL DEVIATIONS

- 713. MALIGNANT NEOPLASM OF PROSTATE
(PRINCIPAL DIAGNOSIS 185)
- 828. CIRRHOSIS
(PRINCIPAL DIAGNOSIS 571)
- 890. FRACTURE OF RADIUS OR ULNA
(PRINCIPAL DIAGNOSIS 813)

1

2

2

DATE PREPARED

MAY 22, 1982

TIME PERIOD

JUL-SEP 1980

Page

1

DEPT OF SURGERY

CPIA

Quality Assurance Monitor Priority For Investigation

SAMPLE HOSPITAL
IDS, CPIA

QUALITY ASSURANCE MONITOR

CONTROL GROUP

U.S. NORTH CENTRAL REGION
PATIENTS 4,621,152
HOSPITALS 642
TIME PERIOD JAN-DEC 79

The content of this report is based on a comparison of the hospital performance measured in the Monitor Profile against the suggested standards, thresholds for investigation, and reference norms (See the back of this report for definitions of these terms.)

The groups monitored in QAM are presented in two lists:

1. "QAM GROUPS WITH NO MATERIAL DEVIATIONS"

These are the patient groups in which hospital performance for each criterion either met the suggested standard or was above the threshold for investigation. These groups are listed separately because further investigation into the care of these patients may be considered of low priority relative to those in groups where material deviations occur.

2. "HIGHEST (or SECOND, THIRD, or FOURTH) PRIORITY FOR INVESTIGATION"

QAM groups with material deviations (hospital performance for at least one criterion is below the threshold) are analyzed by a statistical method which takes into account the nature of the criterion, the degree of the deviation, and the proportion of criteria with material deviations.

For more explanation of how the suggested priorities are determined, refer to the back of this report.

PAS

Professional Activity Sheet

Page

2 of 1

002

JUL-SEP 8

Total
Patients

2

IN OF SURGERY

QAM Group

HIGHEST PRIORITY FOR INVESTIGATION

- 301. ALL PATIENTS, BASIC WORKUP
- 302. PATIENTS WITH ELEVATED ADM DIAS BP (EKG PREGNANCY)
- 309. PATIENTS GIVEN DIURETICS
- 710. MALIGNANT NEOPLASM OF LARGE INTESTINE
(PRINCIPAL DIAGNOSIS 153)
- 714. MALIGNANT NEOPLASM OF BLADDER
(PRINCIPAL DIAGNOSIS 188)
- 731. DIABETES MELLITUS, ADULT
(PRINCIPAL DIAGNOSIS 250)
- 765. ACUTE MYOCARDIAL INFARCTION
(PRINCIPAL DIAGNOSIS 410)
- 770. PULMONARY EMBOLISM AS ANY DIAGNOSIS, SURGICAL
(ANY DIAGNOSIS 415.1)
- 772. HEART FAILURE
(PRINCIPAL DIAGNOSIS 428)
- 849. BENIGN PROSTATIC HYPERTROPHY
(PRINCIPAL DIAGNOSIS 600)
- 876. DERANGEMENT AND DISPLACEMENT OF LUMBAR DISC
(PRINCIPAL DIAGNOSIS 722.10, 32, 52, 73, 83, 83.S3)
- 891. FRACTURE OF UPPER END OF FEMUR
(PRINCIPAL DIAGNOSIS 820)
- 892. CONCUSSION
(PRINCIPAL DIAGNOSIS 850)

SECOND PRIORITY FOR INVESTIGATION

- 746. ALCOHOL DEPENDENCE SYNDROME AS ANY DIAGNOSIS
(ANY DIAGNOSIS 603)
- 763. ESSENTIAL HYPERTENSION
(PRINCIPAL DIAGNOSIS 401)
- 766. ANGINA PECTORIS
(PRINCIPAL DIAGNOSIS 413)
- 771. ARRHYTHMIA AND SLOWED CONDUCTION
(PRINCIPAL DIAGNOSIS 426-427)
- 773. CEREBROVASCULAR DISEASE
(PRINCIPAL DIAGNOSIS 430-438)
- 775. PHLEBITIS AND THROMBOPHLEBITIS
(PRINCIPAL DIAGNOSIS 451)
- 776. VARICOSE VEINS OF LEG
(PRINCIPAL DIAGNOSIS 454)
- 806. EMPHYSEMA AND OTHER COPD
(PRINCIPAL DIAGNOSIS 492, 494-496)
- 825. GASTRIC ULCER, UNCOMPLICATED
(PRINCIPAL DIAGNOSIS 531.30, 531.70 OF 531.90)

DATE PREPARED

MAY 22, 1982

TIME PERIOD

JUL-SEP 1980

Page

2 of 2

CPHA

Quality Assurance Monitor Priority For Investigation

SAMPLE HOSPITAL
IDS, CPHA

QUALITY ASSURANCE MONITOR

CONTROL GROUP

U.S. NORTH CENTRAL REGION
PATIENTS 4,621,152
HOSPITALS 642
TIME PERIOD JAN-DEC 79

The content of this report is based on a comparison of the hospital performance measured in the Monitor Profile against the suggested standards, thresholds for investigation, and regional norms. (See the back of this report for definitions of these terms.)

The groups monitored in QAM are presented in two lists:

1. "QAM GROUPS WITH NO MATERIAL DEVIATIONS"

These are the patient groups in which hospital performance for each criterion either met the suggested standard or was above the threshold for investigation. These groups are listed separately because further investigation into the care of these patients may be considered of low priority relative to those in groups where material deviations occur.

2. "HIGHEST for SECOND, THIRD, or FOURTH) PRIORITY FOR INVESTIGATION"

QAM groups with material deviations (hospital performance for at least one criterion is below the threshold) are analyzed by a statistical method which takes into account the nature of the criterion, the degree of the deviation, and the proportion of criteria with material deviations.

For more explanation of how the suggested priorities are determined, refer to the back of this report.

PAS

Professional Review Page 3

3

JUL-SEP 80

Total Patients 2

DEPT OF SURGERY

QAM Group

SECOND PRIORITY FOR INVESTIGATION (CONTINUED)

827. DIVERTICULAR DISEASE (PRINCIPAL DIAGNOSIS 562)	1
847. URETERAL CALCULUS (PRINCIPAL DIAGNOSIS 592.1)	5
848. CYSTITIS (PRINCIPAL DIAGNOSIS 595)	3
882. CHEST PAIN (PRINCIPAL DIAGNOSIS 786.5)	2

THIRD PRIORITY FOR INVESTIGATION

303. PATIENTS WITH ADMISSION HGB<10 G/MZ (HCT<30%)	18
307. PATIENTS GIVEN ANTICOAGULANTS	54
310. PATIENTS WITH OTHER DRUG THERAPY -02 INTERSTIAL INFECTION DISEASE ADULT	165
715. BENIGN URINARY DISEASE (PRINCIPAL DIAGNOSIS 217 OR 610)	1
735. ANEMIA (PRINCIPAL DIAGNOSIS 280-235)	11
756. CONVULSIVE DISORDERS, ADULT (PRINCIPAL DIAGNOSIS 345 OR 780.3)	2
757. CHRONIC OTITIS MEDIA (PRINCIPAL DIAGNOSIS 381.1-381.4, 382.1-382.9)	1
800. ACUTE UPPER RESPIRATORY INFECTION (PRINCIPAL DIAGNOSIS 460-465)	2
804. PNEUMONIA, ADULT (PRINCIPAL DIAGNOSIS 480-486)	5
826. NONGASTRIC PEPTIC ULCER (PRINCIPAL DIAGNOSIS 532-534 WITH .30, .70, OR .90)	2
881. HEADACHE (PRINCIPAL DIAGNOSIS 784.0)	2
883. ABDOMINAL PAIN (PRINCIPAL DIAGNOSIS 789.0)	1

FOURTH PRIORITY FOR INVESTIGATION

304. PATIENTS WITH ABNORMAL BLOOD SUGAR	146
305. PATIENTS WITH URINE POSITIVE FOR PROTEIN	108
306. PATIENTS WITH URINE POSITIVE FOR SUGAR	21
308. PATIENTS GIVEN ANTIBIOTICS	255

DATE PREPARED

MAY 22, 1982

TIME PERIOD

JUL-SEP 1980

Page

3

CPHA

Quality Assurance Monitor Priority For Investigation

SAMPLE HOSPITAL
IDS, CPHA

QUALITY ASSURANCE MONITOR

CONTROL GROUP

U.S. NORTH CENTRAL REGION
PATIENTS 4,621,152
HOSPITALS 642
TIME PERIOD JAN-DEC 79

The content of this report is based on a comparison of the hospital performance measured in the Monitor Profile against the suggested standards, thresholds for investigation, and regional norms. (See the back of this report for definitions of these terms.)

The groups monitored in QAM are presented in two lists

1. "QAM GROUPS WITH NO MATERIAL DEVIATIONS"

These are the patient groups in which hospital performance for each criterion either met the suggested standard or was above the threshold for investigation. These groups are listed separately because further investigation into the care of these patients may be considered of low priority relative to those in groups where material deviations occur.

2. "HIGHEST (or SECOND, THIRD, or FOURTH) PRIORITY FOR INVESTIGATION"

QAM groups with material deviations (hospital performance for at least one criterion is below the threshold) are analyzed by a statistical method which takes into account the nature of the criterion, the degree of the deviation, and the proportion of criteria with material deviations.

For more explanation of how the suggested priorities are determined, refer to the back of this report

PAS

Professional Association of Surgeons

Page

4

JUL 1980

DEPT OF SURGERY

QAM Group

Total
Patients
2

FOURTH PRIORITY FOR INVESTIGATION (CONTINUED)

311.	PATIENTS TRANSFUSED	68
711.	MALIGNANT NEOPLASM OF LUNG, BRONCHUS, TRACHEA (PRINCIPAL DIAGNOSIS 162)	1
712.	MALIGNANT NEOPLASM OF BREAST (PRINCIPAL DIAGNOSIS 174-175)	1
747.	PSYCHOPHYSIOLOGICAL DISORDERS (PRINCIPAL DIAGNOSIS 306 OR 316)	1
762.	CHRONIC RHEUMATIC HEART DISEASE (PRINCIPAL DIAGNOSIS 393-398)	1
774.	ARTERIAL EMBOLISM AND THROMBOSIS (PRINCIPAL DIAGNOSIS 444)	1
808.	ASTHMA, ADULT (PRINCIPAL DIAGNOSIS 493)	1
830.	DISEASE OF PANCREAS, SURGICAL (PRINCIPAL DIAGNOSIS 577)	1
875.	RHEUMATOID ARTHRITIS (PRINCIPAL DIAGNOSIS 714)	1

DATE PREPARED

MAY 22 1982

TIME PERIOD

JUL-SEP 1980

Page

4

CPIA

Quality Assurance Monitor Monitor Profile

SAMPLE HOSPITAL
IDS, CPIA

Control 4,621,152 PATIENTS
Group: 642 HOSPITALS
U.S. NORTH CENTRAL REGION
JAN-DEC 79
TIME PERIOD: 1 22

PAS
Professional Assurance
Page 1 22

LET OF SURVEY

JUL-SEP 80

CRITERIA										PROFILE																			
PATIENT GROUPS AND MONITOR PARAMETERS										HOSPITAL PERFORMANCE % BY TIME PERIOD					H					Suggested Standard Threshold For Improvement Median (50th percentile) M									
										STANDARDS		TIME PERIOD			HOSPITAL PERFORMANCE Which Shows The Standard X					Type error									
										SUGGESTED	HOS- PITAL'S	THIS TIME	LAST TIME	YEAR AGO	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%				
301. ALL PATIENTS, BASIC WORKU																													
TOTAL PATIENTS 731																													
FATALITY INDEX 0.48																													
MORTALITY RATE (X) 1																													
AVERAGE STAY 8.2																													
MEDIAN STAY 6 LOW																													
X MALE 36																													
AVERAGE CHARGE \$2,856																													
CHARGE INDEX 1.05																													
1. X WITH URINALYSIS										100		97																	
2. X WITH HEMOGLOBIN OR HEMATOCRIT										100		98																	
3. X 1 YEAR AND OVER WITH ADM BP RECORDED										100		96																	
4. X WITH WEIGHT RECORDED										100		91																	
5. X MEETING MINIMUM LABORATORY REQUIREMENTS										100		78																	
6. X WITH SYMPTOM AS PRINCIPAL DIAGNOSIS										0-5		2																	
7. X AGE 10+ WITH RECTAL EXAM										100		32																	
(153/4/2)																													
302. PATIENTS WITH ELEVATED ADM DIAS BP (EXC PREGNANCY)																													
TOTAL PATIENTS 13																													
X OF ALL PATIENTS FOR THIS REPORT 2																													
1. X WITH HYPERT DX OR WITH DISCH VITAL SIGNS STABLE										100		31																	
2. X WITH URINALYSIS										100		92																	
3. X AGE 19+ GIVEN DIURETICS OR HYPOTENSIV										100		75																	
(6/8)*																													
4. X VITL ECG										100		54																	
303. PATIENTS WITH ADMISSION HGB<10 GMS (HCT<30%)																													
TOTAL PATIENTS 18																													
X OF ALL PATIENTS FOR THIS REPORT 2																													
1. X WITH BLEEDING, HEMOLYSIS, ANEMIA, OR MALIGANCY										100		78																	
2. X GIVEN GEN ANESTH WITHOUT TRANSFUSION										0		38																	
(3/8)																													
304. PATIENTS WITH ABNORMAL BLOOD SUGAR																													
TOTAL PATIENTS 146																													
X OF ALL PATIENTS FOR THIS REPORT 20																													
1. X OF THOSE NOT DIAGNOSED AS DIABETIC OR HYPOGLYCEMIA WHO HAD A GTT OR REPEAT BLOOD GLUCOSE										100		48																	
(54/113)																													

CPHA

Quality Assurance Monitor Monitor Profile

SAMPLE HOSPITAL
IDS, CPHA

Control Group: 4,621,152 PATIENTS
642 HOSPITALS
U.S. NORTH CENTRAL REGION
JAN-DEC 79

PAS
Professional Activity Study
Page 2 of 2

JUL-SEP 81

DEPT. OF SURGERY

CRITERIA		PROFILE													
PATIENT GROUPS AND MONITOR PARAMETERS		STANDARDS		HOSPITAL PERFORMANCE % BY TIME PERIOD		HOSPITAL PERFORMANCE									
		SUGGESTED		THIS LAST YEAR		HOSPITAL PERFORMANCE Which Meets The Standard X Median (50th percentile) M									
		HOS- PITAL S		TIME TIME		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									
		-2- -3-		-4- -5-		HOSPITAL PERFORMANCE									

CPA

Quality Assurance Monitor Monitor Profile

SNIP HOSPITAL
LOS, CPA

Control 4,621,152 PATIENTS
Group: 642 HOSPITALS

U.S. NORTH CENTRAL REGION
TIME PERIOD: JAN-DEC 79

PAS
Professional Activity Study
Page

JUL-SEP 80
JUL-SEP 80

CRITERIA										PROFILE									
PATIENT GROUPS AND MONITOR PARAMETERS										HOSPITAL PERFORMANCE									
310. PATIENTS WITH OTHER DRUG THERAPY										KEY									
TOTAL PATIENTS 165										HOSPITAL PERFORMANCE									
% OF ALL PATIENTS FOR THIS REPORT 23										HOSPITAL PERFORMANCE									
1. 2 GIVEN HYPOTENSIVES WITHOUT HYPERT DX (24%)										HOSPITAL PERFORMANCE									
2. 3 GIVEN CARDIOREGULATORS W/O CARDIAC DX (32%)										HOSPITAL PERFORMANCE									
3. 1 GIVEN ANTIDIABETICS W/O DIABETIC DX (13%)										HOSPITAL PERFORMANCE									
4. 2 GIVEN NEUROLEPTICS W/O MAJ PSYCH DX (15%)										HOSPITAL PERFORMANCE									
311. PATIENTS TRANSFUSED										HOSPITAL PERFORMANCE									
TOTAL PATIENTS 69										HOSPITAL PERFORMANCE									
% OF ALL PATIENTS FOR THIS REPORT 9										HOSPITAL PERFORMANCE									
% OVER AGE 1 GIVEN ONLY 1 UNIT 22										HOSPITAL PERFORMANCE									
1. 2 WITH INDICATION FOR TRANSFUSION										HOSPITAL PERFORMANCE									
2. 1 WITH ANEMIA (EX 285.1) GIVEN PACKED RBC (2/4/8)										HOSPITAL PERFORMANCE									
3. 1 WITH TRANSFUSION REACTION, 999.6-999.8										HOSPITAL PERFORMANCE									
702. INFECTIOUS DISEASE, ADULT (PRINCIPAL DIAGNOSIS 001-009)										HOSPITAL PERFORMANCE									
TOTAL PATIENTS 1										HOSPITAL PERFORMANCE									
% OF ALL PATIENTS FOR THIS REPORT +										HOSPITAL PERFORMANCE									
FATALITY INDEX 0.00										HOSPITAL PERFORMANCE									
AVERAGE STAY 4.6										HOSPITAL PERFORMANCE									
MEDIAN STAY 4										HOSPITAL PERFORMANCE									
AVERAGE CHARGE \$1,014										HOSPITAL PERFORMANCE									
CHARGE 30% 0.52										HOSPITAL PERFORMANCE									
1. 100% FATALITY RATE (X)										HOSPITAL PERFORMANCE									
2. 2 WITH ELECTROLYTE DETERMINATION										HOSPITAL PERFORMANCE									
3. 2 WITH STOOL CULTURE: 90.9%, 90.93										HOSPITAL PERFORMANCE									
4. 2 GIVEN PARENTERAL FLUIDS										HOSPITAL PERFORMANCE									
5. 2 GIVEN ANTIBIOTICS OR OTHER ANTI-INFECTIVES EXCL 001, 002, 004, 006										HOSPITAL PERFORMANCE									
6. 2 ISOLATED										HOSPITAL PERFORMANCE									
7. 2 WITH PROGRESS SATISFACTORY AT DISCHARGE										HOSPITAL PERFORMANCE									

CPIA

Quality Assurance Monitor Monitor Profile

SAMPLE HOSPITAL
LOS ANGELES

Control Group: 4,621,152 PATIENTS
642 HOSPITALS
U.S. NORTH CENTRAL REGION
JAN-DEC 79

PAS
Professional Analysis
Page 4

JUL-SEP 80

CRITERIA	PATIENT GROUPS AND MONITOR PARAMETERS	STANDARDS	HOSPITAL PERFORMANCE % BY TIME PERIOD		PROFILE									
			THIS TIME	LAST YEAR	KEY	10%	20%	30%	40%	50%	60%	70%	80%	90%
710 MALIGNANT NEOPLASM OF LARGE INTESTINE (PRINCIPAL DIAGNOSIS 153)	TOTAL PATIENTS 5 % OF ALL PATIENTS FOR THIS REPORT 1 FATALITY INDEX 2.05 AVERAGE STAY 27.4 MEDIAN STAY 24 AVERAGE CHARGE \$9,150 CHARGE INDEX 1.42	-2- -3- -4- -5-	-4- -3- -2- -1-	-4- -3- -2- -1-										
1. MORTALITY RATE (%)	45.0-46.9	0-5	20	20	S-S	M	H							
2. % WITH MALIGNANT TISSUE REPORTED		100	100	100										
3. % WITH Sigmoidoscopy OR COLONOSCOPY		100	100	100										
4. % WITH LOWER GI X-RAY, 87.64		100	100	100										
5. % WITH POSTOPERATIVE COMPLICATION		100	100	100										
6. % WITH NORMAL GI FUNCTION AT DISCHARGE (0/4)		0	0	0	S-M	H								
711 MALIGNANT NEOPLASM OF LUNG, BRONCHUS, TRACHEA (PRINCIPAL DIAGNOSIS 162)	TOTAL PATIENTS 7 % OF ALL PATIENTS FOR THIS REPORT 1 FATALITY INDEX 1.14 AVERAGE STAY 17.0 MEDIAN STAY 15 AVERAGE CHARGE \$5,472 CHARGE INDEX 1.09	-2- -3- -4- -5-	-4- -3- -2- -1-	-4- -3- -2- -1-										
1. MORTALITY RATE (%)		0-20	14	14	S-X	-X	-S	M						
2. POSTOPERATIVE MORTALITY RATE (%)		0-5	14	14	S-S	M	H							
3. % WITH MALIGNANT TISSUE REPORTED		100	100	100										
4. % WITH POSTOPERATIVE COMPLICATION		0	0	0	X-M									
5. % WITH PROGRESS SATISFACTORY AT DISCH (6/6)		100	100	100										

CPHA

Quality Assurance Monitor Monitor Profile

SAMPLE HOSPITAL
IDS, CPHA

Control Group: 4,621,152 PATIENTS
642 HOSPITALS
U.S. NORTH CENTRAL REGION
TIME PERIOD: JAN-DEC 79

PAS
Professional Activity Study
Page 5 of 8

002
JUL-SEP 8

CRITERIA										PROFILE									
PATIENT GROUPS AND MONITOR PARAMETERS										HOSPITAL PERFORMANCE % BY									
										KEY: Hospital Performance Which Meets The Standard X									
										H Suggests Standard Threshold For Investigation Median (50m percentile) M									
										0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%									
										HOSPITAL PERFORMANCE % BY									
										TIME PERIOD									
										SUGGESTED									
										HOS- PITAL'S									
										THIS TIME									
										LAST YEAR									
										TIME									
										TIME									
										AGO									
										-3- -4- -5- -6-									
										-2- -3- -4- -5- -6-									
										-1- -2- -3- -4- -5- -6-									
										-7- -8- -9- -10- -11- -12-									
										-13- -14- -15- -16- -17- -18-									
										-19- -20- -21- -22- -23- -24-									
										-25- -26- -27- -28- -29- -30-									
										-31- -32- -33- -34- -35- -36-									
										-37- -38- -39- -40- -41- -42-									
										-43- -44- -45- -46- -47- -48-									
										-49- -50- -51- -52- -53- -54-									
										-55- -56- -57- -58- -59- -60-									
										-61- -62- -63- -64- -65- -66-									
										-67- -68- -69- -70- -71- -72-									
										-73- -74- -75- -76- -77- -78-									
										-79- -80- -81- -82- -83- -84-									
										-85- -86- -87- -88- -89- -90-									
										-91- -92- -93- -94- -95- -96-									
										-97- -98- -99- -100- -101- -102-									
										-103- -104- -105- -106- -107- -108-									
										-109- -110- -111- -112- -113- -114-									
										-115- -116- -117- -118- -119- -120-									
										-121- -122- -123- -124- -125- -126-									
										-127- -128- -129- -130- -131- -132-									
										-133- -134- -135- -136- -137- -138-									
										-139- -140- -141- -142- -143- -144-									
										-145- -146- -147- -148- -149- -150-									
										-151- -152- -153- -154- -155- -156-									
										-157- -158- -159- -160- -161- -162-									
										-163- -164- -165- -166- -167- -168-									
										-169- -170- -171- -172- -173- -174-									
										-175- -176- -177- -178- -179- -180-									
										-181- -182- -183- -184- -185- -186-									
										-187- -188- -189- -190- -191- -192-									
										-193- -194- -195- -196- -197- -198-									
										-199- -200- -201- -202- -203- -204-									
										-205- -206- -207- -208- -209- -210-									
										-211- -212- -213- -214- -215- -216-									
										-217- -218- -219- -220- -221- -222-									
										-223- -224- -225- -226- -227- -228-									
										-229- -230- -231- -232- -233- -234-									
										-235- -236- -237- -238- -239- -240-									
										-241- -242- -243- -244- -245- -246-									
										-247- -248- -249- -250- -251- -252-									
										-253- -254- -255- -256- -257- -258-									
										-259- -260- -261- -262- -263- -264-									
										-265- -266- -267- -268- -269- -270-									
										-271- -272- -273- -274- -275- -276-									
										-277- -278- -279- -280- -281- -282-									
										-283- -284- -285- -286- -287- -288-									
										-289- -290- -291- -292- -293- -294-									
										-295- -296- -297- -298- -299- -300-									
										-301- -302- -303- -304- -305- -306-									
										-307- -308- -309- -310- -311- -312-									
										-313- -314- -315- -316- -317- -318-									
										-319- -320- -321- -322- -323- -324-									
										-325- -326- -327- -328- -329- -330-									
										-331- -332- -333- -334- -335- -336-									
										-337- -338- -339- -340- -341- -342-									
										-343- -344- -345- -346- -347- -348-									
										-349- -350- -351- -352- -353- -354-									
										-355- -356- -357- -358- -359- -360-									
										-361- -362- -363- -364- -365- -366-									
										-367- -368- -369- -370- -371- -372-									
										-373- -374- -375- -376- -377- -378-									
										-379- -380- -381- -382- -383- -384-									
										-385- -386- -387- -388- -389- -390-									
										-391- -392- -393- -394- -395- -396-									
										-397- -398- -399- -400- -401- -402-									
										-403- -404- -405- -406- -407- -408-									
										-409- -410- -411- -412- -413- -414-									
										-415- -416- -417- -418- -419- -420-									
										-421- -422- -423- -424- -425- -426-									
										-427- -428- -429- -430- -431- -432-									
										-433- -434- -435- -436- -437- -438-									
										-439- -440- -441- -442- -443- -444-									
										-445- -446- -447- -448- -449- -450-									
										-451- -452- -453- -454- -455- -456-									
										-457- -458- -459- -460- -461- -462-									
										-463- -464- -465- -466- -467- -468-									
										-469- -470- -471- -472- -473- -474-									
										-475- -476- -477- -478- -479- -480-									
										-481- -482- -483- -484- -485- -486-									
										-487- -488- -489- -490- -491- -492-									
										-493- -494- -495- -496- -497- -498-									
										-499- -500- -501- -502- -503- -504-									
										-505- -506- -507- -508- -509- -510-									
										-511- -512- -513- -514- -515- -516-									
										-517- -518- -519- -520- -521- -522-									
										-523- -524- -525- -526- -527- -528-									
										-529- -530- -531- -532- -533- -534-									
										-535- -536- -537- -538- -539- -540-									
										-541- -542- -543- -544- -545- -546-									
										-547- -548- -549- -550- -551- -552-									
										-553- -554- -555- -556- -557- -558-									
										-559- -560- -561- -562- -563- -564-									
										-565- -566- -567- -568- -569- -570-									
										-571- -572- -573- -574- -575- -576-									
										-577- -578- -579- -580- -581- -582-									
										-583- -584- -585- -586- -587- -588-									
										-589- -590- -591- -592- -593- -594-									
										-595- -596- -597- -598- -599- -600-									
										-601- -602- -603- -604- -605- -606-									
										-607- -608- -609- -610- -611- -612-									
										-613- -614- -615- -616- -617- -618-									
										-619- -620- -621- -622- -623- -624-									
										-625- -626- -627- -628- -629- -630-									
										-631- -632- -633- -634- -635- -636-									
										-637- -638- -639- -640- -641- -642-									
										-643- -644- -645- -646- -647- -648-									
										-649- -650- -651- -652- -653- -654-									
										-655- -656- -657- -658- -659- -660-									
										-661- -662- -663- -664- -665- -666-									
										-667- -668- -669- -670- -671- -672-									
										-673- -674- -675- -676- -677- -678-									
										-679- -680- -681- -682- -683- -684-									
										-685- -686- -687- -688- -689- -690-									
										-691- -692- -693- -694- -695- -696-									
										-697- -698- -699- -700- -701- -702-									
										-703- -704- -705- -706- -707- -708-									
										-709- -710- -711- -712- -713- -714-									
										-715- -716- -717- -718- -719- -720-									
										-721- -722- -723- -724- -725- -726-									
										-727- -728- -729- -730- -731- -732-									
										-733- -734- -735- -736- -737- -738-									
										-739- -740- -741- -742- -743- -744-									
										-745- -746- -747- -748- -749- -750-									
										-751- -752- -753- -754- -755- -756-									
										-757- -758- -759- -760- -761- -762-									
										-763- -764- -765- -766- -767- -768-									
										-769- -770- -771- -772- -773- -774-									
										-775- -776- -777- -778- -779- -780-									
										-781- -782- -783- -784- -785- -786-									
										-787- -788- -789- -790- -791- -792-									
										-793- -794- -795- -796- -797- -798-									
										-799- -800- -801- -802- -803- -804-									
										-805- -806- -807- -808- -809- -810-									
										-811- -812- -813- -814- -815- -816-									
										-817- -818- -819- -820- -821- -822-									
										-823- -824- -825- -826- -827- -828-									
										-829- -830- -831- -832- -833- -834-									
										-835- -836- -837- -838- -839- -840-									
										-841- -842- -843- -844- -845- -846-									
										-847- -848- -849- -850- -851- -852-									
										-853- -854- -855- -856- -857- -858-									
										-859- -860- -861- -862- -863- -864-									
										-865- -866- -867- -868- -869- -870-									
										-871- -872- -873- -874- -875- -876-									
										-877- -878- -879- -880- -881- -882-									
										-883- -884- -885- -886- -887- -888-									
										-889- -890- -891- -892- -893- -894-									
										-895- -896- -897- -898- -899- -900-									
										-901- -902- -903- -904- -905- -906-									
										-907- -908- -909- -910- -911- -912-									
										-913- -914- -915- -916- -917- -918-									
										-919- -920- -921- -922- -923- -924-									
										-925- -926- -927- -928- -929- -930-									
										-931- -932- -933- -934- -935- -936-									
										-937- -938- -939- -940- -941- -942-									
										-943- -944- -945- -946- -947- -948-									
										-949- -950- -951- -952- -953- -954-									
										-955- -956- -957- -958- -959- -960-									
										-961- -962- -963- -964- -965- -966-									
										-967- -968- -969- -970- -971- -972-									
										-973- -974- -975- -976- -977- -978-									
										-979- -980- -981- -982- -983- -984-									
										-985- -986- -987- -988- -989- -990-									
										-991- -992- -993- -994- -995- -996-									
										-997- -998- -999- -1000- -1001- -1002-									
										-1003- -1004- -1005- -1006- -1007- -1008-									
										-1009- -1010- -1011- -1012- -1013- -1014-									
										-1015- -1016- -1017- -1018- -1019- -1020-									
										-1021- -1022- -1023- -1024- -1025- -1026-									
										-1027- -1028- -1029- -1030- -1031- -1032-									
										-1033- -1034- -1035- -1036- -1037- -1038-									
										-1039- -1040- -1041- -1042- -1043- -1044-									
										-1045- -1046- -1047- -1048- -1049- -1050-									
										-1051- -1052- -1053- -1054- -1055- -1056-									
										-1057- -1058- -1059- -1060- -1061- -1062-									
										-1063- -1064- -1065- -1066- -1067- -1068-									
										-1069- -1070- -1071- -1072- -1073- -1074-									
										-1075- -1076- -1077- -1078- -1079- -1080-									
										-1081- -1082- -1083- -1084- -1085- -1086-									
										-1087- -1088- -1089- -1090- -1091- -1092-									
										-1093- -1094- -1095- -1096- -1097- -1098-									
										-1099- -1100- -1101- -1102- -1103- -1104-									
										-1105- -1106- -1107- -1108- -1109- -1110-									
										-1111- -1112- -1113- -1114- -1115- -1116-									
										-1117- -1118- -1119- -1120- -1121- -1122-									
										-1123- -1124- -1125- -1126- -1127- -1128-									
										-1129- -1130- -1131- -1132- -1133- -1134-									
										-1135- -1136- -1137- -1138- -1139- -1140-									
										-1141- -1142- -1143- -1144- -1145- -1146-									
										-1147- -1148- -1149- -1150- -1151- -1152-									
										-1153- -1154- -1155- -1156- -1157- -1158-									
										-1159- -1160- -1161- -1162- -1163- -1164-									
										-1165- -1166- -1167- -1168- -1169- -1170-									
										-1171- -1172- -1173- -1174- -1175- -1176-									
										-1177- -1178- -1179- -1180- -1181- -1182-									
										-1183- -1184- -1185- -1186- -1187- -1188-									
										-1189- -1190- -1191- -1192- -1193- -1194-									
										-1195- -1196- -1197- -1198- -1199- -1200-									
										-1201- -1202- -1203- -1204- -1205- -1206-									
										-1207- -1208- -1209- -1210- -1211- -1212-									
										-1213- -1214- -1215- -1216- -1217- -1218-									
										-1219- -1220- -1221- -1222- -1223- -1224-									
										-1225- -1226- -1227- -1228- -1229- -1230-									
										-1231- -1232- -1233- -1234- -1235- -1236-									
										-1237- -1238- -1239- -1240- -1241- -1242-									
										-1243- -1244- -1245- -1246- -1247- -1248-									
										-1249- -1250- -1251- -1252- -1253- -1254-									
										-1255- -1256- -1257- -1258- -1259- -1260-									
										-1261- -1262- -1263- -1264- -1265- -1266-									
										-1267- -1268- -1269- -1270- -1271- -1272-									
										-1273- -1274- -1275- -1276- -1277- -1278-									
										-1279- -1280- -1281- -1282- -1283- -1284-									
										-1285- -1286- -1287- -1288- -1289- -1290-									
										-1291- -1292- -1293- -1294- -1295- -1296-									
										-1297- -1298- -1299- -1300- -1301- -1302-									
										-1303- -1304- -1305- -1306- -1307- -1308-									
										-1309- -1310- -1311- -1312- -1313- -1314-									
										-1315- -1316- -1317- -1318- -1319- -1320-									
										-1321- -1322- -1323- -1324- -1325- -1326-									
										-1327- -1328- -1329- -1330- -1331- -1332-									
										-1333- -1334- -1335- -1336- -1337- -1338-									
										-1339- -1340- -1341- -1342- -1343- -1344-									
										-1345- -1346- -1347- -1348- -1349- -1350-									
										-1351- -1352- -1353- -1354- -1355- -1356-									
										-1357- -1358- -1359- -1360- -1361- -1362-									
										-1363- -1364- -1365- -1366- -1367- -1368-									
										-1369- -1370- -1371- -1372- -1373- -1374-									
										-1375- -1376- -1377- -1378- -1379- -1380-									
										-1381- -1382- -1383- -1384- -1385- -1386-									
										-1387- -1388- -1389- -1390- -1391- -1392-									
										-1393-									

SEE BACK OF REPORT FOR FURTHER EXPLANATION

CPHA

Quality Assurance Monitor Priority For Investigation

SAMPLE HOSPITAL
IDS, CPHA

QUALITY ASSURANCE MONITOR

CONTROL GROUP

U.S. NORTH CENTRAL REGION
PATIENTS 4,621,152
HOSPITALS 642
TIME PERIOD JAN-DEC 79

The content of this report is based on a comparison of the hospital performance measured in the Monitor Profile against the suggested standards, thresholds for investigation, and regional norms. (See the back of this report for definitions of these terms.)

The groups monitored in QAM are presented in two lists

1. "QAM GROUPS WITH NO MATERIAL DEVIATIONS"

These are the patient groups in which hospital performance for each criterion either met the suggested standard or was above the threshold for investigation. These groups are listed separately because further investigation into the care of these patients may be considered of low priority relative to those in groups where material deviations occur.

2. "HIGHEST (or SECOND, THIRD, or FOURTH) PRIORITY FOR INVESTIGATION"

QAM groups with material deviations (hospital performance for at least one criterion is below the threshold) are analyzed by a statistical method which takes into account the nature of the criterion, the degree of the deviation, and the proportion of criteria with material deviations.

For more explanation of how the suggested priorities are determined, refer to the back of this report.

PAS
Professional Activity Standard
Page 1

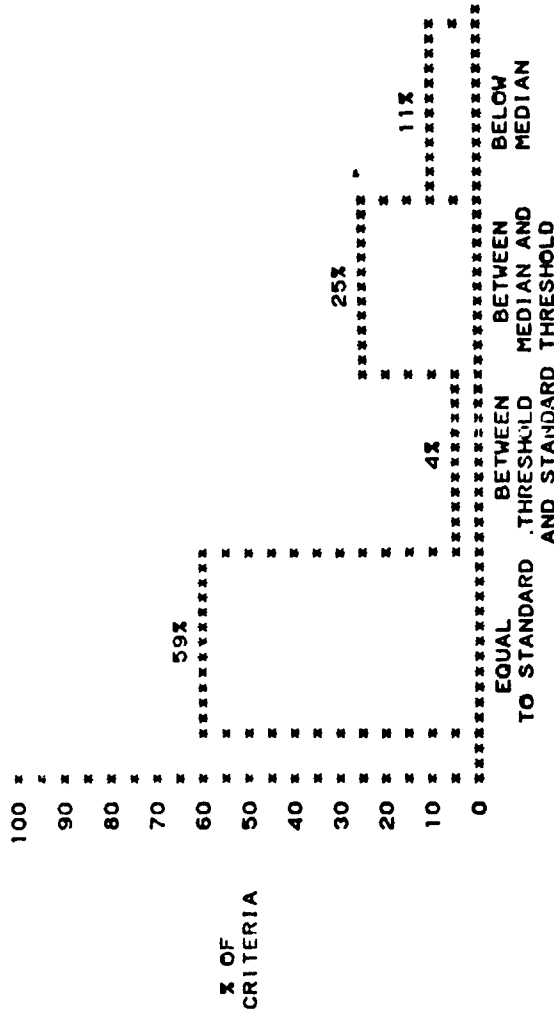
00.
JUL-SEP 80

Total
Patients
2

DEPT OF OB/GYN

QAM Group

PERFORMANCE SUMMARY



* YOUR PERFORMANCE FOR 106 CRITERIA WAS USED FOR THIS GRAPH.
SEE THE BACK OF THIS REPORT FOR DEFINITIONS OF STANDARD, THRESHOLD, AND MEDIAN.

CPHA

Quality Assurance Monitor Priority For Investigation

SAMPLE HOSPITAL
IDS, CPHA

QUALITY ASSURANCE MONITOR

CONTROL GROUP

U.S. NORTH CENTRAL REGION
PATIENTS 4,621,152
HOSPITALS 642
TIME PERIOD: JAN-DEC 79

The content of this report is based on a comparison of the hospital performance measured in the Monitor Profile against the suggested standards, thresholds for investigation, and regional norms. (See the back of this report for definitions of these terms.)

The groups mentioned in QAM are presented in two lists:

1. "QAM GROUPS WITH NO MATERIAL DEVIATIONS"

These are the patient groups in which hospital performance for each criterion either met the suggested standard or was above the threshold for investigation. These groups are listed separately because further investigation into the care of these patients may be considered of low priority relative to those in groups where material deviations occur.

2. "HIGHEST (or SECOND, THIRD, or FOURTH) PRIORITY FOR INVESTIGATION"

QAM groups with material deviations (hospital performance for at least one criterion is below the threshold) are analyzed by a statistical method which takes into account the nature of the criterion, the degree of the deviation, and the proportion of criteria with material deviations.

For more explanation of how the suggested priorities are determined, refer to the back of this report.

PFI

CPHA

DEPT OF OB/GYN

QAM Group

NO MATERIAL DEVIATIONS

402. PATIENTS WITH ELEVATED ADM DIAS BP (FXC PREGNANCY)
862. BRFEC PRESENTATION, DELIVERED AS AN; DIAGNOSIS
(ANY DIAGNOSIS 652.2, 669.6 WITH 5TH DIGIT 0, 1 OR 2)

Quality Assurance Monitor Priority For Investigation

SAMPLE HOSPITAL
IDS, CPHA

QUALITY ASSURANCE MONITOR

CONTROL GROUP

U.S. NORTH CENTRAL REGION
PATIENTS 4,621,152
HOSPITALS 642
TIME PERIOD JAN-DEC 79

The content of this report is based on a comparison of the hospital performance measured in the Monitor Profile against the suggested standards, thresholds for investigation, and regional norms. (See the back of this report for definitions of these terms.)

The groups monitored in QAM are presented in two lists:

1. "QAM GROUPS WITH NO MATERIAL DEVIATIONS"

These are the patient groups in which hospital performance for each criterion either met the suggested standard or was above the threshold for investigation. These groups are listed separately because further investigation into the care of these patients may be considered of low priority relative to those in groups where material deviations occur.

2. "HIGHEST (or SECOND, THIRD, or FOURTH) PRIORITY FOR INVESTIGATION"

QAM groups with material deviations (hospital performance for at least one criterion is below the threshold) are analyzed by a statistical method which takes into account the nature of the criterion, the degree of the deviation, and the proportion of criteria with material deviations.

For more explanation of how the suggested priorities are determined, refer to the back of this report.

PFI

1/11/80

DATE PREPARED

MAY 22, 1982

TIME PERIOD

JUL-SEP 1980

DEPT OF OB/GYN

Page

2

PAS
Professional Activities Section
Page

2

JUL-SEP 80

Total
Patients
2

HIGHEST PRIORITY FOR INVESTIGATION

- 401. A. ALL OBSTETRICS PATIENTS. BASIC WORKUP
- 401. B. ALL GYNECOLOGY PATIENTS. BASIC WORKUP
- 806. EMPHYSEMA AND OTHER COPD (PRINCIPAL DIAGNOSIS 492.494-496)
- 850. DISORDERS OF IDENTIFICATION (PRINCIPAL DIAGNOSIS 626.0 626.9)
- 860. ABORTION AS ANY DIAGNOSIS (ANY DIAGNOSIS 634-637)

18
13
54
1
22
10

SECOND PRIORITY FOR INVESTIGATION

- 404. PATIENTS WITH ABNORMAL BLOOD SUGAR
- 406. PATIENTS WITH URINE POSITIVE FOR SUGAR
- 408. PATIENTS GIVEN ANTIBIOTICS
- 735. ANEMIA (PRINCIPAL DIAGNOSIS 280-285)
- 861. DELIVERY AS ANY DIAGNOSIS (ANY DIAG 641-676, 5TH DIGIT 0,1,2 WHERE APPLIC)

18
13
54
1
22
10

THIRD PRIORITY FOR INVESTIGATION

- 407. PATIENTS GIVEN ANTICOAGULANTS
- 409. PATIENTS GIVEN DIURETICS
- 410. PATIENTS WITH OTHER DRUG THERAPY
- 716. UTERINE FIBROMYOMA (PRINCIPAL DIAGNOSIS 218)

6
8
22
10

FOURTH PRIORITY FOR INVESTIGATION

- 403. PATIENTS WITH ADMISSION HGB<10 G/M (HCT<30%)
- 405. PATIENTS WITH URINE POSITIVE FOR PROTEIN
- 411. PATIENTS TRANSFUSED
- 805. INFLUENZA (PRINCIPAL DIAGNOSIS 487)

8
54
9
1

CPHA

Quality Assurance Monitor Monitor Profile

SAMPLE HOSPITAL
IDS: CPHA

Control 4,621,152 PATIENTS
Group: 642 HOSPITALS

U.S. NORTH CENTRAL REGION
TIME PERIOD: JAN-DEC 79

PAS

Professional Activity Chart
Page 1 of 2

REPT OF: OB/GYN
JUL-SEP 8

CRITERIA		STANDARDS		HOSPITAL PERFORMANCE % BY TIME PERIOD		PROFILE										
PATIENT GROUPS AND MONITOR PARAMETERS		SUGGESTED	HOS- PITALS	THIS TIME	LAST YEAR	H										
		-2-	-3-	-4-	-5-	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
401. A. ALL OBSTETRICS PATIENTS, BASIC WORKUP																
TOTAL PATIENTS 161																
FATALITY INDEX 0.00																
AVERAGE STAY 3.7																
MEDIAN STAY 3																
AVERAGE CHARGE \$1,008																
CHARGE INDEX 0.88																
1. 2 W/ URINALYSIS		100		91												
2. 2 W/ HEMOGLOBIN OR HEMATOCRIT		100		99												
3. 2 1 YEAR AND OVER WITH ADM BP RECORDED		100		100												
4. 2 W/ WEIGHT RECORDED		100		93												
5. 2 MINIMUM LABORATORY REQUIREMENTS		100		22												
6. 2 W/ SYMPTOM AS PRINCIPAL DIAGNOSIS		0-5		1												
7. 2 ADMITTED WITH LATER FEVER		0		1												
(2/100)																
401. B. ALL GYNECOLOGY PATIENTS, BASIC WORKUP																
TOTAL PATIENTS 127																
FATALITY INDEX 0.00																
MORTALITY RATE (2) 0																
AVERAGE STAY 5.4																
MEDIAN STAY 5																
AVERAGE CHARGE \$1,772																
CHARGE INDEX 1.05																
1. 2 W/ URINALYSIS		100		100												
2. 2 W/ HEMOGLOBIN OR HEMATOCRIT		100		98												
3. 2 1 YEAR AND OVER WITH ADM BP RECORDED		100		98												
4. 2 W/ WEIGHT RECORDED		100		93												
5. 2 MINIMUM LABORATORY REQUIREMENTS		100		6												
6. 2 W/ SYMPTOM AS PRINCIPAL DIAGNOSIS		0-5		28												
7. 2 W/ PELVIC EXAM		100		6												
8. 2 ADMITTED WITH LATER FEVER		0		6												
(2/100)																
402. PATIENTS WITH ELEVATED ADM DIAS BP (EXC PREGNANCY)																
TOTAL PATIENTS 1																
2 OF ALL PATIENTS FOR THIS REPORT +																
1. 2 W/ HYPERT DX OR WITH DISCH VITAL SIGN STABLE		100		100												
2. 2 W/ URINALYSIS		100		100												
3. 2 AG-19+ GIVEN DIURETIC OR HYPOTENSIVE		100		100												
4. 2 W/ H ECG		100		100												

Quality Assurance Monitor Monitor Profile

Control Group: 4,621,152 PATIENTS
642 HOSPITALS
U.S. NORTH CENTRAL
TIME PERIOD: JAN-DE

PAS

Page 2 of 2

Page 2

JUL-SEP 3

CRITERIA

PATIENT GROUPS AND MONITOR PARAMETERS

403. PATIENTS WITH ADMISSION HGB<10 G/L (HCT<30%)

TOTAL P. TIENTS 8

3 OF ALL PATIENTS FOR THIS REPORT 3

2 WITH BLEEDING, HEMOLYSIS, ANEMIA, OR MALNUTRITION
3 & GIVEN GEN ANESTH WITHOUT TRANSFUSION (C

464. PATIENTS WITH ABNORMAL BLOOD SUGAR

TOTAL PATIENTS 18

2 OF 41 PATIENTS FOR THIS REPORT 6

2. OF THOSE NOT DIAGNOSED AS DIABETIC OR HYPOGLYCEMIC WHO HAD A GTT OR REPEAT BLOOD GLUCOSE (2/12)

405. PATIENT : WITH URINE POSITIVE FOR PROTEIN

TOTAL PATIENTS 54

3 OF ALL PATIENTS FOR THIS REPORT 19

**X WITH DX OF KIDNEY DISEASE, REPEAT UA,
OR OF URINARY SYSTEM EVALUATION**

406. PATIENTS WITH URINE POSITIVE FC3 SUGAR

TOTAL CLIENTS 13

3 OF ALL PATIENTS FOR THIS REPORT 5

REPEAT URINE SUGAR TEST

3. WI BLOOD SUGAR TEST

407. PAT:EI. 5 GIVEN ANT:COAGULANTS

TOTAL PATIENTS 6

2 OF ALL PATIENTS FOR THIS REPORT 2

3.4. Application

2.2.2. COAGULATION TEST

B. 2 WITH STOOL FOR BLOOD

117

Copy available to DTIC does not permit fully legible reproduction

●●●

SEE BACK OF THE PORT FOR FURTHER EXPLANATION

MAY 22, 1982

TIME PERIOD.

JUL - SEP 1980

03
DEPT OF OB/GYN

10

CPIA

Quality Assurance Monitor Monitor Profile

SAMPLE HOS' TAL
IDS, CPHA

Control Group: 4,621,152 PATIENTS
642 HOSPITALS
U. S. NORTH CENTRAL REGION
TIME PERIOD: JAN-DEC 79

PAS
Professional Activity Study
Page 3

DEPI CF OB/CYN
JUL - SEP 1980

CRITERIA				PROFILE																									
PATIENT GROUPS AND MONITOR PARAMETERS				STANDARDS		HOSPITAL PERFORMANCE % BY TIME PERIOD		KEY								HOSPITAL PERFORMANCE				SUGGESTED STANDARD									
				HOS- THIS LAST YEAR	PATIALS	TIME	TIME	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
				-3-	-3-	-4-	-5-	-6-																					
408. PATIENTS GIVEN ANTIBIOTICS																													
TOTAL PATIENTS 54																													
X OF ALL PATIENTS FOR THIS REPORT 19																													
1. X WITH INDICATION																													
2. X WITH SELECTED INFECTIONS WITH C & S (1/2)S																													
				100		24																							
				100		50																							
409. PATIENTS GIVEN DIURETICS																													
TOTAL PATIENTS 8																													
X OF ALL PATIENTS FOR THIS REPORT 3																													
1. X WITH INDICATION																													
2. X WITH WEIGHT RECORDED																													
3. X WITH ELECTROLYTE DETERMINATION																													
				100		25																							
				100		100																							
				100		88																							
410. PATIENTS WITH OTHER DRUG THERAPY																													
TOTAL PATIENTS 22																													
X OF ALL PATIENTS FOR THIS REPORT 8																													
1. X GIVEN DIURETICS WITHOUT HYPERT DX (1/3)S																													
2. X GIVEN CARDIOREGULATORS W/O CARDIAC DX																													
3. X GIVEN ANTIDIABETICS W/O DIABETIC DX (1/3)S																													
4. X GIVEN NEUROLEPTICS W/O MAI PSYCH DX (1/5)S																													
				0		33																							
				0																									
				0		20																							
				0		100																							
411. PATIENTS TRANSFUSED																													
TOTAL PATIENTS 9																													
X OF ALL PATIENTS FOR THIS REPORT 3																													
X OVER ONE 1 GIVEN ONLY 0																													
1. X WITH INDICATION FOR TRANSFUSION																													
2. X WITH ANEMIA (EX 285.1) GIVEN PACKED RBC (1/1)S																													
3. X WITH TRANSFUSION REACTION, 999.6-999.8																													
				100		78																							
				100		100																							
				0		0																							

CPHA

Quality Assurance Monitor Monitor Profile

SAMPLE HOSPITAL
LOS, CPHA

Control 4,621,152 PATIENTS
Group: 642 HOSPITALS

U.S. NORTH CENTRAL REGION
TIME PERIOD: JAN-DEC 79

PAS

Page 4

DEPT OF OB/GYN

CRITERIA

PATIENT GROUPS AND MONITOR PARAMETERS

716. UTERINE LEIOMYOMA
(PRINCIPAL DIAGNOSIS 218)

TOTAL PATIENTS 10
% OF ALL PATIENTS FOR THIS REPORT 3
FATALITY INDEX 0.00
AVERAGE LENGTH OF STAY 6.5
MEDIAN LENGTH OF STAY 7
AVERAGE CHARGE \$2,206
CHARGE INDEX 1.02

1. MORTALITY RATE (X)
2. % WITH CUPPITAGE, HYSTERECTOMY, OR MYOMECTOMY
3. % WITH TUBAL LIGATION
4. % WITH POSTOPERATIVE COMPLICATION
5. % WITH PROGRESS SATISFACTORY AT DISCH

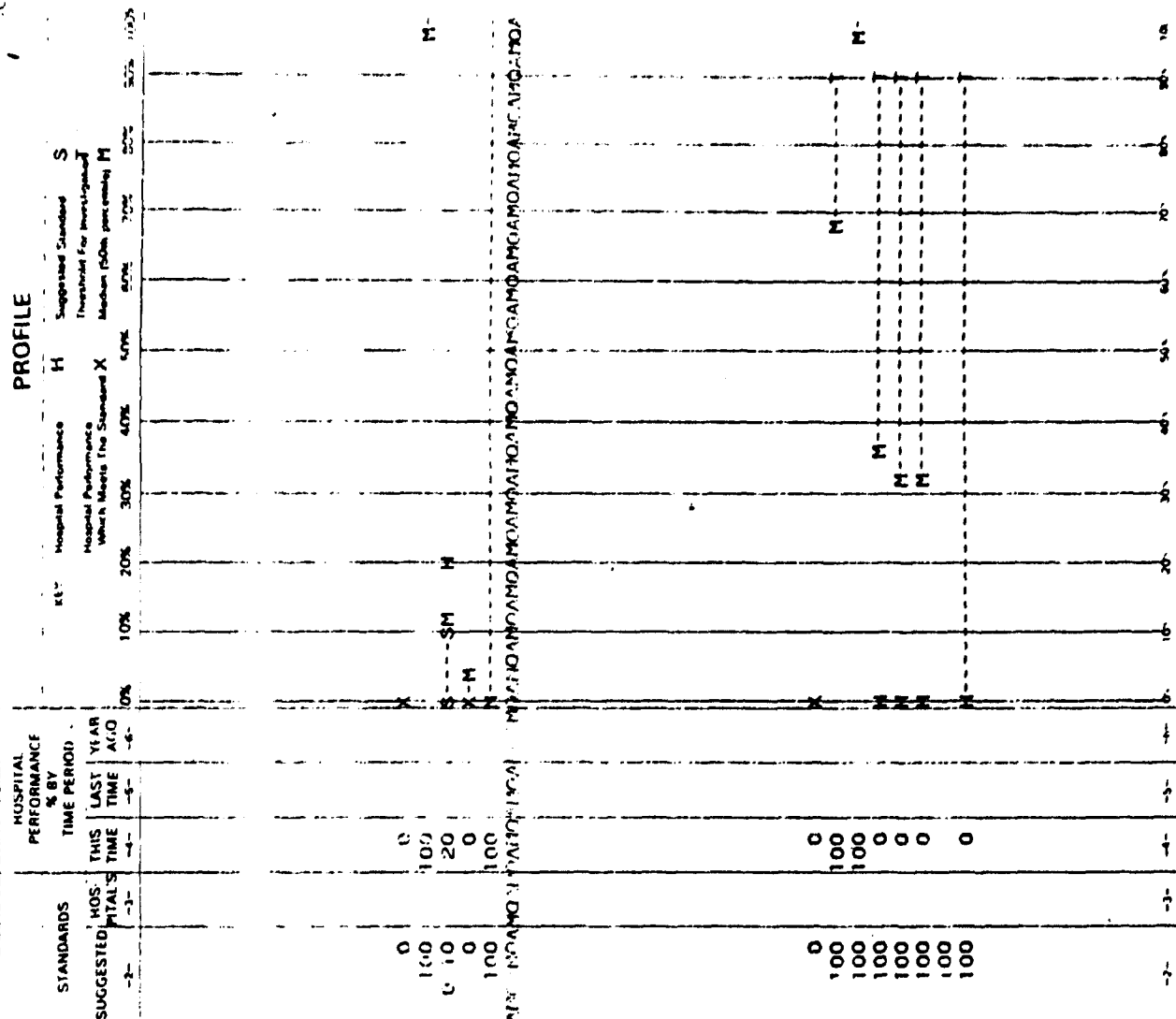
735. ANEMIA

(PRINCIPAL DIAGNOSIS 280-285)

TOTAL PATIENTS 1
% OF ALL PATIENTS FOR THIS REPORT 1
FATALITY INDEX 0.00
AVERAGE LENGTH OF STAY 13.0
MEDIAN LENGTH OF STAY 13
AVERAGE CHARGE \$3,513
CHARGE INDEX 1.18
% TRANSFERRED (EXCL. ACUTE BLOOD LOSS 285.1) 0

1. MORTALITY RATE (X)
2. % WITH ADMISION HGB<10 GMS OR HCT<30%
3. % WITH RED CELL INDICES
4. % WITH SERUM IRON TEST
5. % WITH RETICULOCYTES, NUCLEATED RBC
6. % WITH STOOL FOR BLOOD
7. % TRANSFERRED GIVEN PACKED RBC, EX 285.1
8. % WITH NORMAL OR RISING HGB (HCT) AT DISCH

PROFILE



Quality Assurance Monitor Monitor Profile

Control	4,621,152 PATIENTS
Group:	642 HOSPITALS

Page 532
Professional Anxiety Study

Page 533

002
JUL-SEP 2

PROFILE

PATIENT GROUPS AND MONITOR PARAMETERS

805. INFLUENZA
;PRINCIPAL DIAGNOSIS 487)

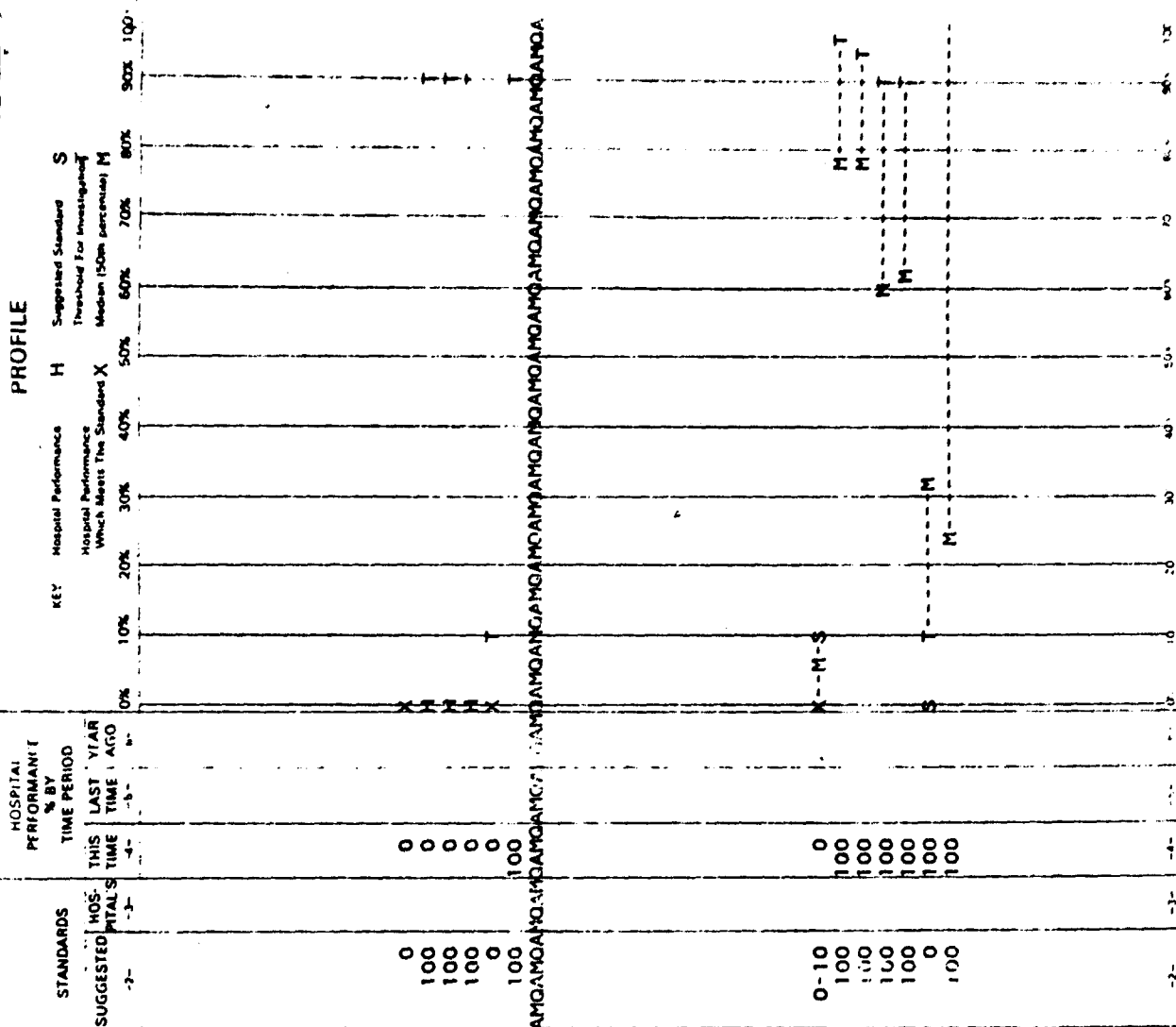
TOTAL PATIENTS	1
% OF ALL PATIENTS FOR THIS REPORT	
FATALITY INDEX	0.00
AVERAGE STAY	3.0
MEDIAN TAY	3
AVERAGE CHARGE	\$566
CHARGE INDEX	0.53

MORTALITY RATE (%)	
1. WITH RECORD	513.0
2. WITH CHEST X-RAY	513.0
3. WITH ANTIBIOTICS	513.0
4. WITH EMPYEMA, SIO, OR LUNG ABSCESS	513.0
5. WITH PROGRESS SATISFACTORY AT DISCH	513.0

806. EMPLOYEES' 1A AND OTHER COPD
(PRINCIPAL DIAGNOSIS 492.494-496)

TOTAL PATIENTS	1
% OF ALL PATIENTS FOR THIS REPORT	
FATALITY INDEX	0.00
AVERAGE STAY	13.0
MEDIAN STAY	13
AVERAGE CHARGE	\$3,372
CHARGE INDEX	0.67

1.	MORTALITY RATE (%)
2.	% WITH FLECTROLYTE DETERMINATION
3.	% WITH ECG
4.	% WITH ARTERIAL BLOOD GASES
5.	% WITH INHALATION THERAPY, INCL IPPB
6.	% GIVEN ANXIOLYTICS OR NEURILEPTICS
7.	% WHO PROGRESS SATISFACTORY AT DISCH



SEE BACK OF REPORT FOR FULLER EXPLANATION []

MAY 22, 1982

TIME PERIOD:

JUL - SEP 1980
DEPT OF OB/GYN

Page 511

3

CPHA

Quality Assurance Monitor Monitor Profile

SARILE HOSPITAL
105, 7THA

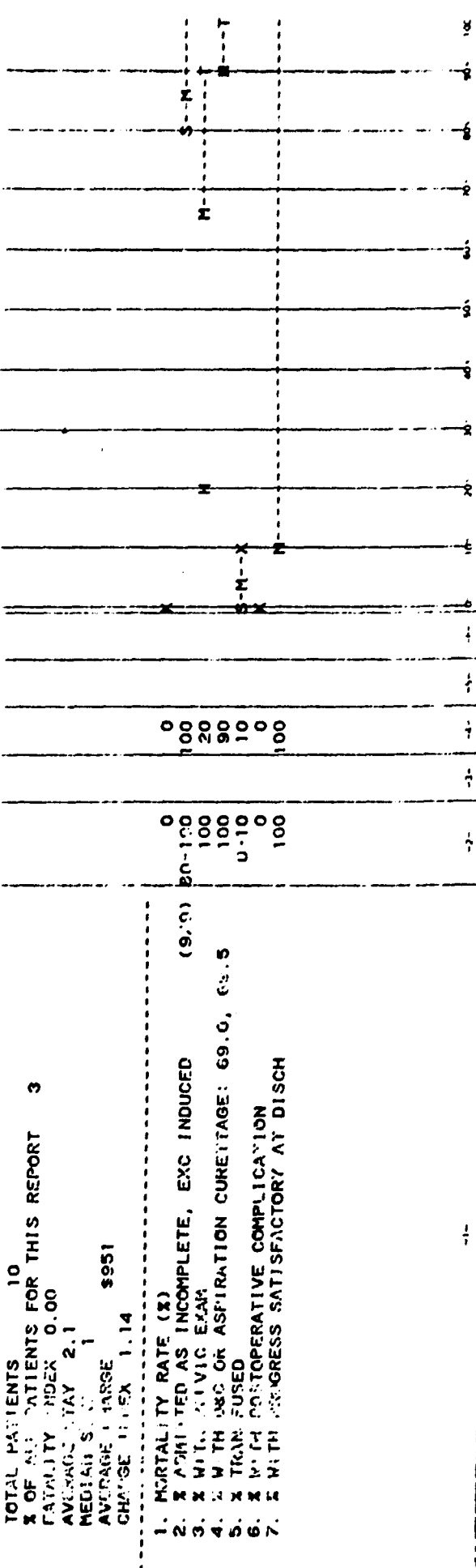
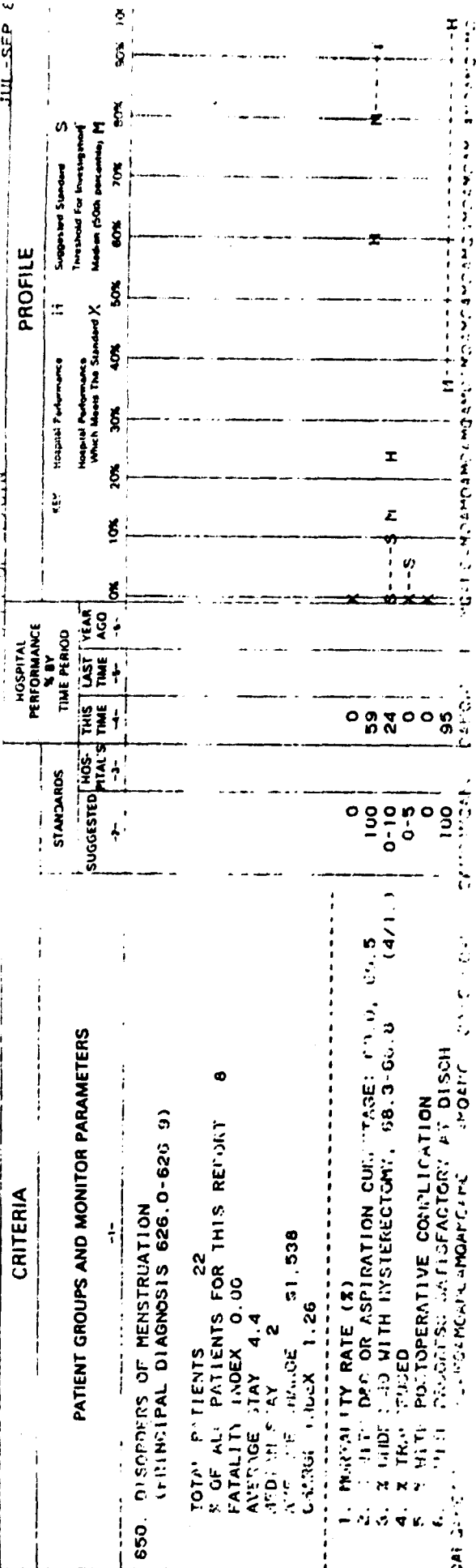
Control Group: 4,621,152 PATIENTS
642 HOSPITALS

U.S. NORTH CENTRAL REGION
JAN-DEC 79

PAS

Professional Agency, 274
Page 6

JUL-SEP 82



CPHA

Quality Assurance Monitor Monitor Profile

SAMPLE HOSPITAL
LOS, CPHA

Control Group: 4,621,152 PATIENTS
642 HOSPITALS
U.S. NORTH CENTRAL REGION
JAN-DEC 79

PAS
Professional Activity Study
Page 7 of 7

DATE OF REPORT: JUL 27, 1982

JUN 27, 80

CRITERIA

PATIENT GROUPS AND MONITOR PARAMETERS

851. DELIVERY AS ANY DIAGNOSIS
(ANY DIAG 641-676, 5TH DIGIT 0, 1, 2 WHERE APPLICABLE)

TOTAL PATIENTS 124
% OF ALL PATIENTS FOR THIS REPORT 43
FATALITY INDEX 0.00
AVERAGE STAY 4.0
MEDIAN STAY 4
AVERAGE CHARGE \$1,110
CHARGE INDEX 0.86

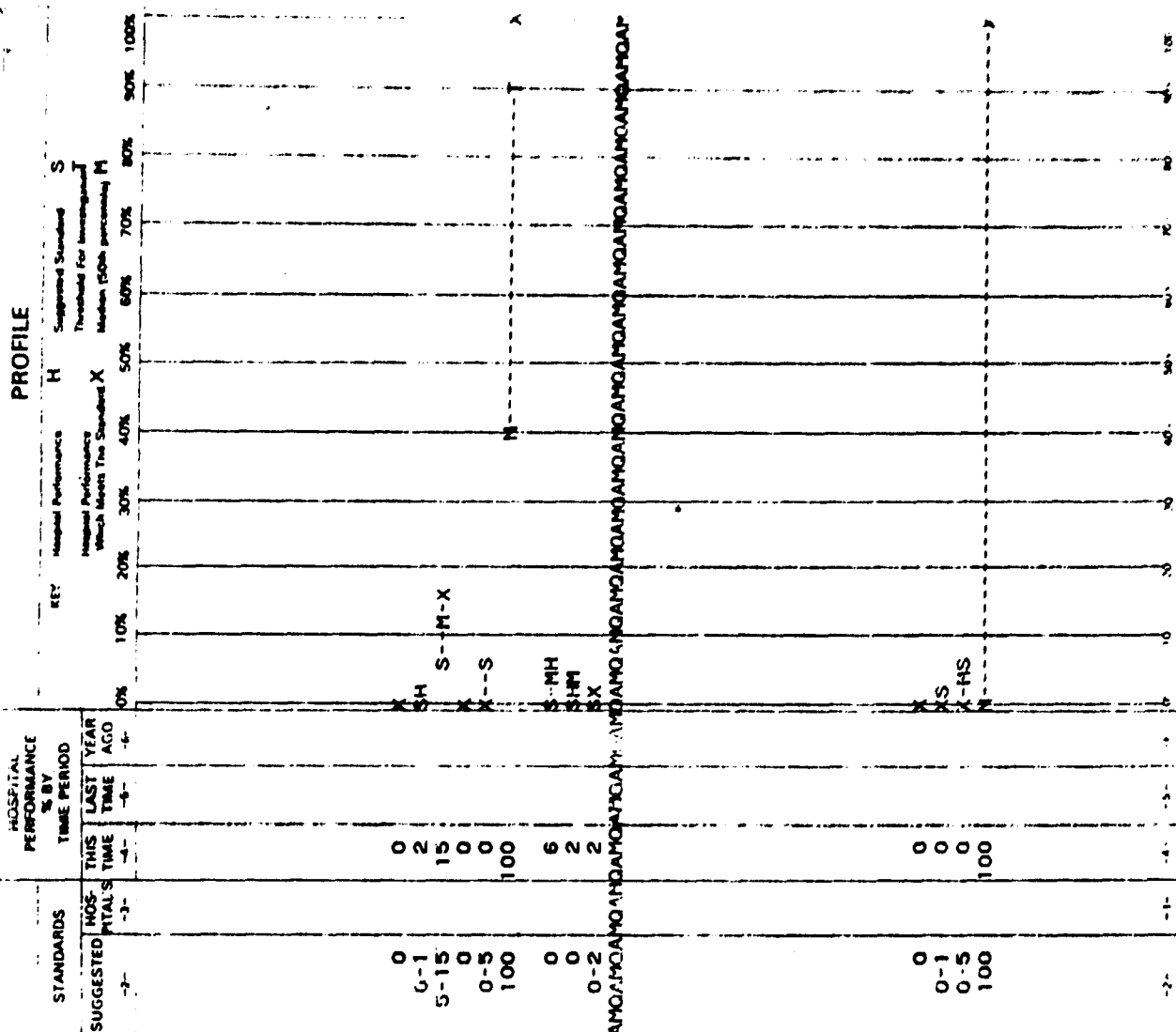
1. MORTALITY RATE (X)
2. % DELIVERING STILLBORN
3. % DELIVERED BY C-SECTION: 74.0-74.2, 74.4, 74.99
4. % DELIVERED WITH HIGH FORCEPS, 72.3
5. % DELIVERED WITH MID-FORCEPS, 72.2
6. % WITH CEPHALOPELVIC DISPROPORTION (3/3)
7. % OR PROLONGED LABOR MONITORED
8. % WITH COMPLICATED DELIVERY COMPLICATIONS
9. % TRANSFUSED

862. BREACH PRESENTATION, DELIVERED AS ANY DIAGNOSIS
(ANY DIAGNOSIS 652.2, 659.6 WITH 5TH DIGIT 0, 1 OR 2)

TOTAL PATIENTS 4
% OF ALL PATIENTS FOR THIS REPORT 1
FATALITY INDEX 0.00
AVERAGE STAY 4.3
MEDIAN STAY 5
AVERAGE CHARGE \$1,191
CHARGE INDEX 0.86
% DELIVERED BY C-SECTION (74.0-74.4, 74.99) 50

1. MORTALITY RATE (X)
2. % DELIVERING STILLBORN
3. % WITH PERINEAL OR CERVICAL LACERATION
4. % WITH PROGRESS SATISFACTORY AT DISCH

PROFILE



Copy available to DTIC does not permit fully legible reproduction

ANNEX E

Listing of Information Available in the Automated Variance
Report, St. Paul Fire and Marien Insurance Company

TYPE OF INFORMATION AVAILABLE THROUGH
AUTOMATED VARIANCE REPORT

1. Patient Identification
2. Type of Variance
 - a. Medication
 - b. Treatment
 - c. Trauma
 - d. Other
3. Type of Injury
4. Extent of Injury
5. Site Where Variances Occurred
6. Hospital Personnel Involved
7. Factors Associated with Variance.
 - a. Staff
 - b. Patient
 - c. Visitor
 - d. Material
 - e. Safety Devices

11. DISTRIBUTION LIST:

Defense Technical Information Center (2)

HQDA (DASG-HCD-S) (1)

Dir, Joint Medical Library, Offices of The Surgeons General, USA/USAF,
The Pentagon, RM 1B-473, Washington, DC 20310 (1)

Comdt, Academy of Health Sciences US Army (1)

Stimson Library, Academy of Health Sciences, US Army (1)